



# **Dialight LED Panel Mount Indicator Catalog**

for LED and Relampable Products

# On when it counts.

# Products and solutions that protect your business





# **Typical Applications**

Dialight's panel mount products are used for status indication in broad range of applications from heavy duty vehicles, military avionics displays to servers and communications equipment. Some examples of common applications are:

- Medical
- Military/Aviation
- Oil/Gas/Mining Equipment
- Food Processing
- Marine
- Wire and Harness
- Power Distribution
- Industrial Control Panels
- Test & Measurement
- Traffic controls and Rail Applications
- Servers & Storage
- **Transportation**
- Fan Trays

# About Dialight (Signal and Component Group)

In business since 1938, Dialight continues to pioneer some of the most innovative applications in LED technology since the development of LED in the early 1970's. We put our expertise to work for you by designing the most reliable and costeffective LED products available. As a vertically integrated supplier, Dialight has the resources to design and produce everything in-house, supported by a global sales distribution network.



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<sup>\*</sup>LED Panel Mount Indicators Series with mounting hole diameter.

#### **Front or Rear Panel Mount Indicators**



Mechanical information				
Mounting Hole Size: 0.375" (9.53 mm)				
Max Panel Thickness:	0.312" (7.92 mm)			
Mounting Torque:	8-10 in-lbs torque			

#### **Application:**

Dialight's 249 series LED panel mount indicator is available with a variety of LED's including AllnGap and InGan technology for high brightness applications. These indicators are designed for a variety of applications such as:

- Main and remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation
- Process control

...and many more!

#### **Certifications & Ratings**

RoHS Compliant

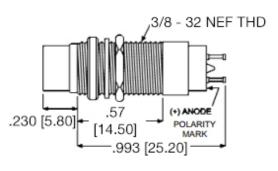
Specifications Specification Specificatio					
Voltage Options:	3.6, 5, 10, 14, and 28V DC	Terminals:	Phosphor Bronze – Fused Tin		
Operating Temp:	-55°C to +71°C (-67°F to +159.8°F)	Knurled Flange Nut:	Aluminum – Black Anodized		
Storage Temp:	-55°C to +71°C (-67°F to +159.8°F)	Lock Washer:	Phosphor Bronze – White Nickel Plated		
Electrical Connection:	Turret terminals for wire wrapping	Nut:	Brass - White Nickel Plated		
Housing:	Aluminum – Black Anodized				

#### **Dimensions**

#### STOVEPIPE LENS

#### lockwash - .22 x 1/2 nut - 3/32 x 1/2 flat hex OD internal tooth 3/8 - 32 NEF THD knurled flange nut .099 x .509 max OD .571 (+) ANODE .230 POLARITY [14.50] [5.80]MARK .993 [25.20] .330 r[8.40]\* .280.16 [4.06] [7.10]

#### CYLINDRICAL LENS 1



Cylindrical lens will provide wider viewing angle.

## **Ordering Information**

Part Number	Color	Voltage (V DC)*	Current (mA)	Typical Intensity (mcd)
		Stovepipe Cap		
249-4162-3734-504F	Blue	3.5**	10	1500
249-7867-3731-504F	Red	3.6	20	170
249-7967-3732-504F	Green	3.6	20	100
249-8067-3733-504F	Yellow	3.6	20	150
249-4164-3734-504F	Blue	5	10	1500
249-7868-3731-504F	Red	5	20	170
249-7968-3732-504F	Green	5	20	100
249-8068-3733-504F	Yellow	5	20	150
249-4166-3734-504F	Blue	10	10	1500
249-7870-3731-504F	Red	10	20	170
249-7970-3732-504F	Green	10	20	100
249-8070-3733-504F	Yellow	10	20	150
249-4167-3734-504F	Blue	14	10	1500
249-7871-3731-504F	Red	14	20	170
249-7971-3732-504F	Green	14	20	100
249-8071-3733-504F	Yellow	14	20	150
249-4168-3734-504F	Blue	28	10	1500
249-7872-3731-504F	Red	28	20	170
249-7972-3732-504F	Green	28	20	100
249-8072-3733-504F	Yellow	28	20	150
		Cylindrical Cap		
249-4162-3334-504F	Blue	3.5**	10	700
249-7867-3331-504F	Red	3.6	20	55
249-7967-3332-504F	Green	3.6	20	40
249-8067-3333-504F	Yellow	3.6	20	75
249-4164-3334-504F	Blue	5	10	700
249-7868-3331-504F	Red	5	20	55
249-7968-3332-504F	Green	5	20	40
249-8068-3333-504F	Yellow	5	20	75
249-4166-3334-504F	Blue	10	10	700
249-7870-3331-504F	Red	10	20	55
249-7970-3332-504F	Green	10	20	40
249-8070-3333-504F	Yellow	10	20	75
249-4167-3334-504F	Blue	14	10	700
249-7871-3331-504F	Red	14	20	55
249-7971-3332-504F	Green	14	20	40
249-8071-3333-504F	Yellow	14	20	75
249-4168-3334-504F	Blue	28	10	700
249-7872-3331-504F	Red	28	20	55
249-7972-3332-504F	Green	28	20	40
249-8072-3333-504F	Yellow	28	20	75

<sup>\*</sup>Dialight recommends tolerance of 5% of specified voltage range.

\*\*VF typical - Requires current limiting resistor

# 556 Series **%**

#### **Standard Panel Mount Indicators**



Mechanical information				
Mounting Hole Size:	1.0" (25.4 mm)			
Max Panel Thickness:	Flat: 0.600" (15.24 mm)			
	Dome: 0.187" (4.27 mm)			
Mounting Torque:	40 in-lbs			

#### **Application:**

The 556 Series LED Panel Mount Indicators incorporate both InGaN and AllnGaP technologies to offer maximum light output. This is a highly durable package, designed to withstand outdoor applications susceptible to rain, dust and sunlight.

- Instrument panels
- Safety applications
- Transportation rail, bus, airline
- Vending, gaming
- Lane control
- Display lighting

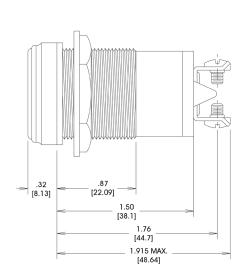
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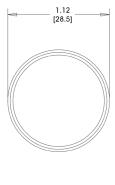
#### **Certifications & Ratings**

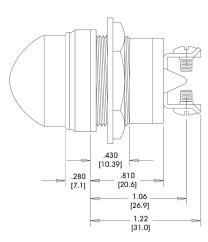
- UL 1598 (E156890)
- IP66
- NEMA 4x
- RoHS Compliant w/6C exemption
- IK07

		Specifications	
Voltage Options:	12 to 125V DC, and 125, 230V AC	Terminals:	Brass - Hot solder dip per Mil-F-14072D, M258, Type II
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Lens Material:	Transparent Polycarbonate (UL 94V-0)
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	Phosphor Bronze – White Nickel Plated
Electrical Connection:	6-32 Screw Terminals	Nut:	Brass - White Nickel Plated
Housing:	Nickel plated brass, other plating opti	ons available	

#### **Dimensions**







Dimension are in Inches [mm]

# **Ordering Information**

Part Number	Lens Style	Color	Voltage	Voltage Type	Current (mA)	Typical Intensity (mcd)
556-1003-304F	Flat	White	12	V DC	60	6900
556-1503-304F	Flat	Red	12	V DC	95	5100
556-1603-304F	Flat	Green	12	V DC	60	6900
556-1683-304F	Flat	Cyan	12	V DC	60	6900
556-1703-304F	Flat	Yellow	12	V DC	95	5100
556-1803-304F	Flat	Blue	12	V DC	60	2000
556-1903-304F	Flat	Orange	12	V DC	95	5100
556-1004-304F	Flat	White	24	V DC	32	6900
556-1504-304F	Flat	Red	24	V DC	46	5100
556-1604-304F	Flat	Green	24	V DC	32	6900
556-1684-304F	Flat	Cyan	24	V DC	32	6900
556-1704-304F	Flat	Yellow	24	V DC	46	5100
556-1804-304F	Flat	Blue	24	V DC	32	2000
556-1904-304F	Flat	Orange	24	V DC	46	2000
556-1508-304F	Flat	Red	37.5	V DC	20	4500
556-1608-304F	Flat	Green	37.5	V DC	16	6900
556-1708-304F	Flat	Yellow	37.5	V DC	20	4500
556-1506-304F	Flat	Red	72	V DC	18.5	3100
556-1606-304F	Flat	Green	72	V DC	16	3100
556-1706-304F	Flat	Yellow	72	V DC	20	1700
556-1806-304F	Flat	Blue	72	V DC	18.5	1700
556-1007-304F	Flat	White	125	V DC	10.5	3100
556-1507-304F	Flat	Red	125	V AC	10	1200
556-1607-304F	Flat	Green	125	V DC	10	1700
556-1707-304F	Flat	Yellow	125	V DC	10	1200
556-1005-304F	Flat	White	125	V AC	11	3100
556-1505-304F	Flat	Red	125	V AC	10.5	2000
556-1605-304F	Flat	Green	125	V AC	9.5	3100
556-1685-304F	Flat	Yellow	125	V AC	9.5	3100
556-1705-304F	Flat	Yellow	125	V AC	10.5	2000
556-1805-304F	Flat	Blue	125	V AC	9.5	860
556-1905-304F	Flat	Orange	125	V AC	10.5	860
556-1009-304F	Flat	White	230	V AC	6	3100
556-1509-304F	Flat	Red	230	V AC	7	2000
556-1609-304F	Flat	Green	230	V AC	7	3100
556-1709-304F	Flat	Yellow	230	V AC	7	2000
556-1809-304F	Flat	Blue	230	V AC	7	860
556-1909-304F	Flat	Orange	230	V AC	7	3100
	• • • • • • • • • •					

<sup>\*</sup>For Domed Lens Style replace 4th digit with "3" for example: 558-3003-304F

# **Day Light Viewable Panel Mount Indicators**



Mechanical information				
Mounting Hole Size: 1.0" (25.4 mm)				
Max Panel Thickness:	0.600" (15.24 mm)			
Mounting Torque:	40 in-lbs torque			

#### **Application:**

The 556 Series LED Panel Mount Indicators incorporate both InGaN and AllnGaP technologies to offer maximum light output. This is a highly durable package, designed to withstand outdoor applications susceptible to rain, dust and sunlight.

- Instrument panels
- UL 508 panel applications
- Power Generators
- Ground support vehicles
- Transportation rail, bus, airline
- Display lighting
- ...and many more!

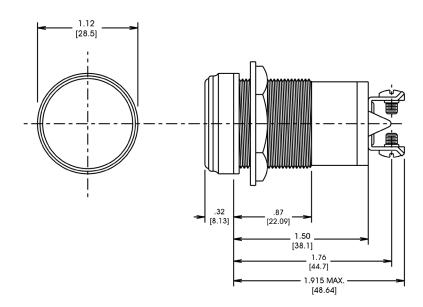
- Safety applications
- Agricultural controls
- Environmental Monitoring Equipment
- Pump system controllers
- Lane control

#### **Certifications & Ratings**

- UL1598 (E156890)
- NEMA 4X
- IP66
- RohS Compliant w/6C exemption

		Specifications	
Voltage Options:	12 to 125V DC and 125, 230V AC	Terminals:	Brass - Hot solder dip per Mil-F-14072D, M258, Type II
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Lens Material:	Clear UV Stabilized Polycarbonate (UL 94V-0)
Storage Temp:	-40°C to +100°C (-40°F to -212°F)	Lock Washer:	Phosphor Bronze – White Nickel Plated
Electrical Connection:	6-32 Screw Terminals	Nut:	Brass - White Nickel Plated
Housing:	Nickel plated brass, other plating opti	ons available	

#### **Dimensions**



# **Ordering Information**

Part Number	Color	Voltage	Voltage Type	Current (mA)	Typical Intensity (mcd)
556-1503-314F	Red	12	V DC	95	5100
556-1603-314F	Green	12	V DC	60	6900
556-1683-314F	Cyan	12	V DC	60	6900
556-1703-314F	Yellow	12	V DC	95	5100
556-1803-314F	Blue	12	V DC	60	2000
556-1903-314F	Orange	12	V DC	95	5100
556-1504-314F	Red	24	V DC	46	5100
556-1604-314F	Green	24	V DC	32	6900
556-1684-314F	Cyan	24	V DC	32	6900
556-1704-314F	Yellow	24	V DC	46	5100
556-1804-314F	Blue	24	V DC	32	2000
556-1904-314F	Orange	24	V DC	46	5100
556-1508-314F	Red	37.5	V DC	20	5100
556-1608-314F	Green	37.5	V DC	16	6900
556-1708-314F	Yellow	37.5	V DC	20	5100
556-1506-314F	Red	72	V DC	18.5	5100
556-1606-314F	Green	72	V DC	16	6900
556-1706-314F	Yellow	72	V DC	20	5100
556-1507-314F	Red	125	V DC	10	5100
556-1607-314F	Green	125	V DC	10	6900
556-1707-314F	Yellow	125	V DC	10	5100
556-1505-314F	Red	125	V AC	10.5	5100
556-1605-314F	Green	125	V AC	9.5	6900
556-1685-314F	Cyan	125	V AC	9.5	6900
556-1705-314F	Yellow	125	V AC	10.5	5100
556-1805-314F	Blue	125	V AC	9.5	2000
556-1905-314F	Orange	125	V AC	10.5	5100
556-1509-314F	Red	230	V AC	7	5100
556-1609-314F	Green	230	V AC	7	6900
556-1709-314F	Yellow	230	V AC	7	5100
556-1809-314F	Blue	230	V AC	7	2000
556-1909-314F	Orange	230	V AC	7	5100

## Class 1, Div2, Panel Mount Indicator



Mechanical information					
Mounting Hole Size:	1.0" (25.4 mm)				
Max Panel Thickness:	Flat: 0.600" (15.24 mm)				
	Dome: 0.187" (4.27 mm)				
Mounting Torque:	40 in-lbs torque				

#### Application:

The 556 Series LED Panel Mount Indicators incorporate both InGaN and AllnGaP technologies to offer maximum light output. This is a highly durable package, designed to withstand outdoor applications susceptible to rain, dust and sunlight. In addition, the Class I, Division 2 rating allows for use in hazardous environments common to the oil and gas, mining, and chemical industries

Mining application

Agricultural controls

Power generators

• Oil Refineries

- Instrument panels
- Safety applications
- UL 508 panel applications
- Petrochemical applications
- Pump system controllers
- Environmental Monitoring Equipment specifications

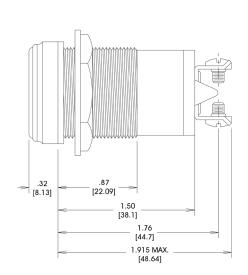
...and many more!

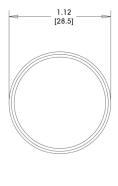
#### **Certifications & Ratings**

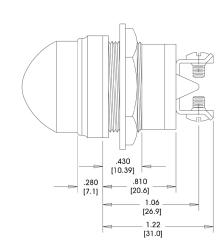
- UL1598 (E156890)
- NEMA4X
- IP66
- IK07
- RoHS Compliant w/6C exemption

		Specifications			
Voltage Options:	12 to 125V DC, 125, 230V AC	Terminals:	Brass - Hot solder dip per Mil-F-14072D, M258, Type II		
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Lens Material:	Transparent Polycarbonate (UL 94V-0)		
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	Phosphor Bronze – White Nickel Plated		
Electrical Connection:	6-32 Screw Terminals	Nut:	Brass - White Nickel Plated		
Housing:	Nickel plated brass, other plating options availabe				

#### **Dimensions**







# **Ordering Information**

Part Number	Lens Style	Color	Voltage	Voltage Type	Current (mA)	Typical Intensity (mcd)
556-1003-304F	Flat	White	12	V DC	60	6900
556-1503-304F	Flat	Red	12	V DC	95	5100
556-1603-304F	Flat	Green	12	V DC	60	6900
556-1683-304F	Flat	Cyan	12	V DC	60	6900
556-1703-304F	Flat	Yellow	12	V DC	95	5100
556-1803-304F	Flat	Blue	12	V DC	60	2000
556-1903-304F	Flat	Orange	12	V DC	95	5100
556-1004-304F	Flat	White	24	V DC	32	6900
556-1504-304F	Flat	Red	24	V DC	46	5100
556-1604-304F	Flat	Green	24	V DC	32	6900
556-1684-304F	Flat	Cyan	24	V DC	32	6900
556-1704-304F	Flat	Yellow	24	V DC	46	5100
556-1804-304F	Flat	Blue	24	V DC	32	2000
556-1904-304F	Flat	Orange	24	V DC	46	2000
556-1508-304F	Flat	Red	37.5	V DC	20	4500
556-1608-304F	Flat	Green	37.5	V DC	16	6900
556-1708-304F	Flat	Yellow	37.5	V DC	20	4500
556-1506-304F	Flat	Red	72	V DC	18.5	3100
556-1606-304F	Flat	Green	72	V DC	16	3100
556-1706-304F	Flat	Yellow	72	V DC	20	1700
556-1806-304F	Flat	Blue	72	V DC	18.5	1700
556-1007-304F	Flat	White	125	V DC	10.5	3100
556-1507-304F	Flat	Red	125	V DC	10	1200
556-1607-304F	Flat	Green	125	V DC	10	1700
556-1707-304F	Flat	Yellow	125	V DC	10	1200
556-1005-304F	Flat	White	125	V AC	11	3100
556-1505-304F	Flat	Red	125	V AC	10.5	2000
556-1605-304F	Flat	Green	125	V AC	9.5	3100
556-1685-304F	Flat	Cyan	125	V AC	9.5	3100
556-1705-304F	Flat	Yellow	125	V AC	10.5	2000
556-1805-304F	Flat	Blue	125	V AC	9.5	860
556-1905-304F	Flat	Orange	125	V AC	10.5	860
556-1009-304F	Flat	White	230	V AC	6	3100
556-1509-304F	Flat	Red	230	V AC	7	2000
556-1609-304F	Flat	Green	230	V AC	7	3100
556-1709-304F	Flat	Yellow	230	V AC	7	2000
556-1809-304F	Flat	Blue	230	V AC	7	860
556-1909-304F	Flat	Orange	230	V AC	7	3100

<sup>\*</sup>For domed lens style: replace 4th digit with "3" for example: 556-3003-324F

#### **Daylight Viewable Panel Mount Indicators**



Mechanical information					
Mounting Hole Size: 0.687" (17.46mm)					
Max Panel Thickness:	0.156" (3.96 mm)				
Mounting Torque: 15 in-lbs torque					

#### Application:

The 557 Series LED Panel Mount Indicators incorporate both InGaN and AllnGaP technologies to offer higher intensities. This is a highly durable package, designed to withstand out-door applications susceptible to rain, dust, and sunlight.

- Instrument panels
- Safety applications
- Transportation rail, bus, airline
- · Vending, gaming
- Lane control

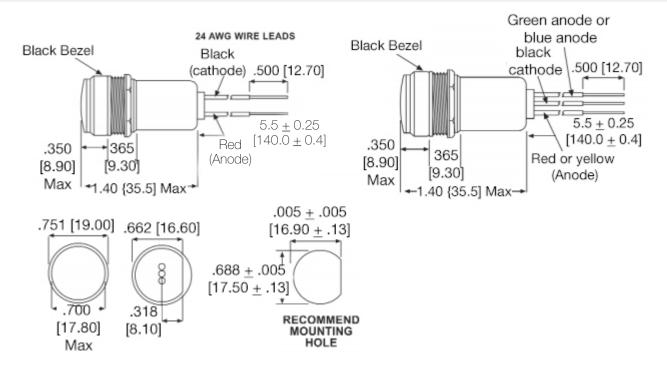
and many more!

#### **Certifications & Ratings**

- RoHS Compliant
- Watertight to Mil-L-3661B spec

Specifications Specification Specificat							
Voltage Options:	5, 12, 24, and 28V DC (Bi-color: 5V DC)	Lens Material:	Transparent Polycarbonate (UL 94V-0)				
Operating Temp:	-25°C to +85°C (Bi-color: -30°C to +80°C)	Wire Leads:	6"				
Storage Temp:	-30°C to +100°C (Bi-color: -40°C to +85°C)	Lock Washer:	Phosphor Bronze – White Nickel Plated				
Electrical Connection:	24 AWG Wire Leads	Nut:	Brass - White Nickel Plated				
Housing:	White Polycarbonate						

#### **Dimensions**



# **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)
557-1502-203F	Red	5	80	1020
557-1602-203F	Green	5	16	3270
557-1702-203F	Yellow	5	80	1430
557-1802-203F	Blue	5	16	1020
557-1002-203F	White	5	16	2860
557-1412-203F	Red/Green	5	70/16	810/1220
557-1422-203F	Red/Blue	5	70/16	610/400
557-1432-203F	Yellow/Green	5	70/16	1630 / 2250
557-1442-203F	Yellow/Blue	5	70/16	810 / 610
557-1452-203F	Yellow/Red	5	70/20	610 / 810
557-1503-203F	Red	12	20	1020
557-1603-203F	Green	12	16	3270
557-1703-203F	Yellow	12	20	1430
557-1803-203F	Blue	12	16	1020
557-1003-203F	White	12	16	2860
557-1505-203F	Red	24	20	1020
557-1605-203F	Green	24	16	3270
557-1705-203F	Yellow	24	20	1430
557-1805-203F	Blue	24	16	1020
557-1005-203F	White	24	16	2860
557-1604-203F	Green	28	16	3270
557-1704-203F	Yellow	28	20	1430
557-1804-203F	Blue	28	16	1020

#### Snap-in LED - .156" (3.96mm) Mounting Hole Panel Mount Indicators



#### **Mechanical information**

 Mounting Hole Size:
 0.155-0.158" (3.94-4.01mm)

 Max Panel Thickness:
 0.031 - 0.062" (.787 - 1.57 mm)

 Mounting Torque:
 N / A

#### **Application:**

Dialight's 558 series LED panel mount indicator is available with a variety of LEDs including AllnGaP and InGaN technology for high brightness applications, bicolor and integral resistors. These indicators are designed for a variety of applications such as:

- Fan tray assemblies
- Datacenter Infrastructure (Servers and Storage)
- Networking Equipment (Switches and routers)
- Storage Networking Hardware (Fibre channel host bus adapter cards)
- Next-Gen Wireless Infrastructure
- Electronic Test & Measurement Instruments
- Communications Testing Equipment

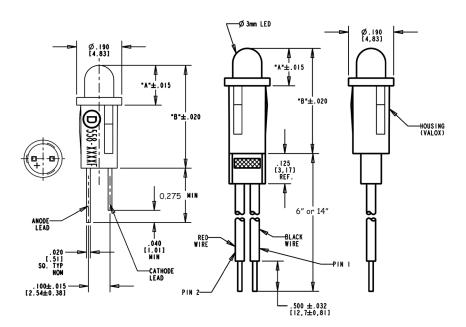
and many more!

#### **Certifications & Ratings**

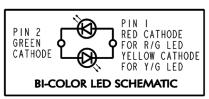
RoHS Compliant

	Specifications		
Voltage Options:	1.8 - 3.3 V DC typical, 5 V DC typical (resistor included)	Connectors	Available upon request
Operating Temp:	See table	Possible Connectors:	Samtec IPD1-05-S-K
Storage Temp:	-55°C to +100°C (-67°F to +212°F)	Terminals	Available upon request
Electrical Connection:	Straight terminals for wire wrapping or 24 AWG lead wire	Possible Terminals:	Samtec CC79L-260-01-S; AMP 1-104480-3
Housing:	UL94V-0 and enhances LED contrast		

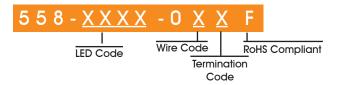
#### **Dimensions**







# **Ordering Information**



Wire Code	Wire Type
0	Standard
2	PVC Free

Termination Code	Termination Type
1	Straight Terminals
3	26 AWG 6" wire leads
7	26 AWG 14" wire leads

LED Code	Color	Peak Wavelength (nm)	Intensity Typ. (mcd)	If Typ. (mA)	Vf Typ. (V DC)	Viewing Angle	Max DC Forward Current (mA)	Туре	Operating Temp	DIM "A"	DIM "B"
0102	Red	635	29	12	5	60	15	5V Integral Resistor	-40°C to +85°C	0.101	0.381
0202	Green	565	19	12	5	60	15	5V Integral Resistor	-40°C to +85°C	0.101	0.381
0302	Yellow	585	12.6	12	5	60	15	5V Integral Resistor	-40°C to +85°C	0.101	0.381
3001	Red/ Green	630/565	5.6/8.7 @10mA	10/20	1.9/2.0 @20mA	200	30/30	Bi-Color	-55°C to +100°C	0.101	0.381
3101	Red/ Green	660/565	12.6/3.7	20	1.6/2.1	200	40/30	Bi-Color	-55°C to +100°C	0.101	0.381
3201	Yellow/ Green	585/565	5.8/12.3	10	2.1/2.1	80	20/30	Bi-Color	-55°C to +100°C	0.101	0.381
0101	Red	635	8.7	10	2	60	30	High Efficiency Diffused	-25°C to +85°C	0.111	0.391
0201	Green	565	12.6	10	2.1	60	30	High Efficiency Diffused	-25°C to +85°C	0.111	0.391
0301	Yellow	585	8.7	10	2.1	60	20	High Efficiency Diffused	-25°C to +85°C	0.111	0.391
0401	Orange	600	7	10	1.9	60	25	High Efficiency Diffused	-55°C to +85°C	0.101	0.381
1801	Red	660	60	20	1.8	60	40	High Efficiency Diffused	-55°C to +100°C	0.101	0.381
0803	Blue	468	57	10	3.2	100	30	Low Current Diffused	-40°C to +100°C	0.107	0.387
1101	Red	635	2.4	2	1.7	60	7	Low Current Diffused	-40°C to +100°C	0.101	0.381
1201	Yellow	585	1.4	2	1.8	60	7	Low Current Diffused	-55°C to +100°C	0.101	0.381
1301	Green	565	1.6	2	1.9	60	7	Non-Tinted/Non-Diffused	-55°C to +100°C	0.101	0.381
0501	Green	565	70	20	2.1	45	30	Non-Tinted/Non-Diffused	-40°C to +100°C	0.101	0.381
0601	Yellow	592	200	20	1.9	45	50	Non-Tinted/Non-Diffused	-40°C to +100°C	0.101	0.381
0701	Red	660	170	20	1.8	45	40	Non-Tinted/Non-Diffused	-40°C to +85°C	0.101	0.381
6003	Blue	468	520	20	3.3	45	30	Non-Tinted/Non-Diffused	-40°C to +85°C	0.101	0.381
6403	White	Y=.31 Y=.32	3000	20	3.3	45	30	Non-Tinted/Non-Diffused	-40°C to +85°C	0.101	0.381
1501	Green	565	40	10	2.1	45	30	Tinted/Non-Diffused	-55°C to +100°C	0.101	0.381
1601	Yellow	585	70	20	2.1	45	20	Tinted/Non-Diffused	-55°C to +100°C	0.101	0.381
1701	Red	660	170	20	1.8	45	40	Tinted/Non-Diffused	-40°C to +100°C	0.101	0.381
6203	Green	518	85	2	2.1	100	30	White Diffused	-45°C to +85°C	0.101	0.381

## Snap-in LED - .250" (6.35mm) Mounting Hole Panel Mount Indicators



#### Mechanical information

 Mounting Hole Size:
 0.249 - 0.252" (6.32 - 6.40 mm)

 Max Panel Thickness:
 0.031 - 0.062" (.787 - 1.57 mm)

 Mounting Torque:
 N/A

#### Application:

Dialight's 559 series LED panel mount indicator is available with a variety of LEDs including AllnGaP and InGaN technology for high brightness applications, bi-color and integral resistors.

- Fan tray assemblies
- Data-center Infrastructure (Servers and Storage)
- Next-Gen Wireless Infrastructure
- Electronic Test & Measurement Instruments
- Communications Testing Equipment
- Handheld Devices

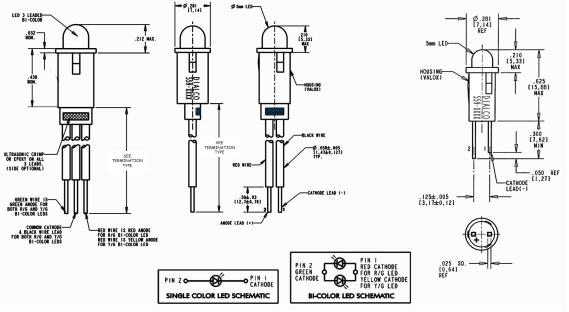
and many more!

#### **Certifications & Ratings**

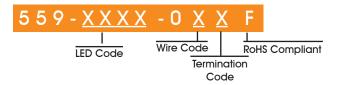
RoHS Compliant

Specifications Specification Specificatio								
Voltage Options:	1.6 - 2.3 V DC typical (current limiting resistor required)	Wire Leads:	6" or 14"					
	5, 12, 24V DC (resistor included)	Connectors	Available upon request					
Operating Temp:	See table	Possible Connectors:	Molex 50-37-5033, 50-57-9202 AMP 3-643814-3					
Storage Temp:	-55°C to +100°C (-67°F to +212°F)	Terminals:	Available upon request					
Electrical Connection:	Straight terminals for wire wrapping or 24 AWG lead wire	Possible Terminals:	Molex 18-07-1040, 16-02-0069,16-02-077 AMP 42067-1					
Housing:	Black - UL94V-0 and enhances LED contrast							

#### Dimensions



# **Ordering Information**



Wire Code	Wire Type
0	Standard
2	PVC Free

Termination Code	Termination Type
1	Straight Terminals
3	24 AWG 6" wire leads
7	24 AWG 14" wire leads

LED Code	Color	Peak Wavelength (nm)	Intensity Typ. (mcd)	If Typ. (mA)	Vf Typ. (V DC)	Veiwing Angle	Max DC Forward Current (mA)	Туре	Operating Temp
5501	Red	635	125	20	2.2	24	30	Non-Tinted/Non-Diffused	-55°C to +100°C
5601	Green	565	120	20	2.3	24	30	Non-Tinted/Non-Diffused	-20°C to +100°C
5701	Yellow	583	140	20	2.1	24	20	Non-Tinted/Non-Diffused	-55°C to +100°C
5801	Orange	605	90	20	2.2	20	50	Non-Tinted/Non-Diffused	-30°C to +85°C
5901	Yellow	592	3100	20	2	15	50	Non-Tinted/Non-Diffused	-40°C to +100°C
6001	Blue	470	1500	20	3.6	30	30	Non-Tinted/Non-Diffused	-30°C to +85°C
6101	Red	635	2100	20	1.9	15	50	Non-Tinted/Non-Diffused	-40°C to +100°C
6201	Green	525	5000	20	3.2	30	30	Non-Tinted/Non-Diffused	-30°C to +85°C
6301	Orange	609	4000	20	1.9	15	50	Non-Tinted/Non-Diffused	-40°C to +100°C
6401	White	X=.31 Y=.32	2500	20	3.2	50	30	Non-Tinted/Non-Diffused	-30°C to +85°C
1101	Red	635	2.3	2	1.7	50	7	Low Current Diffused	-55°C to +100°C
1201	Yellow	583	1.8	2	1.9	50	7	Low Current Diffused	-55°C to +100°C
1301	Green	565	1.8	2	1.8	50	7	Low Current Diffused	-55°C to +100°C
2101	Red	650	6.3	10	2.2	50	20	Diffused	-25°C to +85°C
2201	Green	563	10	10	2.1	65	25	Diffused	-25°C to +85°C
2301	Yellow	585	29	10	1.9	50	20	Diffused	-55°C to +100°C
2501	Orange	600	7	10	1.9	60	30	Diffused	-55°C to +100°C
5101	Red	650	34	20	2.1	50	25	Diffused	-55°C to +100°C
5201	Green	563	34	20	2.2	50	25	Diffused	-55°C to +100°C
5301	Yellow	585	34	20	2.2	50	25	Diffused	-55°C to +100°C
5401	Orange	610	34	20	2.2	50	25	Diffused	-20°C to +85°C
0102	Red	635	8	10	5	60	15	5V Integral Resistor	-40°C to +85°C
0202	Green	565	8	12	5	60	15	5V Integral Resistor	-20°C to +85°C
0302	Yellow	583	8	10	5	60	15	5V Integral Resistor	-40°C to +85°C
0103	Red	635	8	13	12	60	15	12V Integral Resistor	-55°C to +100°C
0203	Green	565	8	13	12	60	15	12V Integral Resistor	-20°C to +85°C
0303	Yellow	583	8	13	12	60	15	12V Integral Resistor	-40°C to +85°C
5904	Yellow	592	3100	20	24	15	50	24V Integral Resistor	-30°C to +85°C
6104	Red	635	2100	20	24	15	50	24V Integral Resistor	-30°C to +85°C
5204	Green	525	5000	20	24	30	50	24V Integral Resistor	-30°C to +85°C
3001	Red/Green	660/565	90/40	20	1.8/2.1	60	40/30	2 leaded Bi-color	-55°C to +100°C
3201	Yellow/Green	585/565	12.6/19	20	2.1/2.1	50	20/30	2 leaded Bi-color	-55°C to +100°C
3501	Red/Green	635/565	5.0/8.0	10	2.1/2.3	65	30	3 leaded Bi-color	-20°C to +85°C
3601	Yellow/Green	590/568	9/13.5	10	2/2.1	65	30	3 leaded Bi-color	-20°C to +85°C

#### **5mm Panel Mount Indicator**



#### **Mechanical information**

Mounting Hole Size: 0.2047" (5.2 mm)

Max Panel Thickness: 0.138" (3.5 mm)

**Mounting Torque:** 0.362 lbs/ft (5 kg/cm) torque

#### Application:

The 605 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

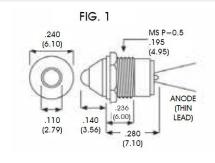
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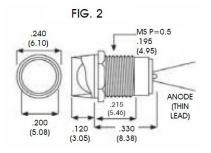
#### **Certifications & Ratings**

• RoHS Compliant

Specifications Specification Specificat						
Voltage Options:	2 V DC (current limiting resistor required)	Housing:	Chrome plated brass			
Operating temp:	-25°C to +85°C (-13°F to +185°F)	Terminals:	Copper-Nickel Plated			
Storage Temp:	-25°C to +100°C (-13°F to +212°F)	Lock washer:	Iron-Nickel Plated			
Electrical Connection:	Through hole leads	Nut:	Brass-Nickel Plated			

#### **Dimensions**





Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)	Led Position	Finish	Figure
605-1111-110F	Red	2	15	38	Protruding	Chrome	1
605-1211-110F	Green	2	15	72	Protruding	Chrome	1
605-1311-110F	Yellow	2	15	53	Protruding	Chrome	1
605-2111-110F	Red	2	15	38	Recess	Chrome	2
605-2211-110F	Green	2	15	72	Recess	Chrome	2
605-2311-110F	Yellow	2	15	53	Recess	Chrome	2

#### **6mm Panel Mount Indicators**



Mechanical information					
Mounting Hole Size:	0.248" (6.3 mm)				
Max Panel Thickness:	0.138" (3.5 mm)				
Mounting Torque:	0.362 lbs/ft (5 kg/cm) torque				

#### **Application:**

The 606 Series LED Panel Mount Indicators are designed for a variety of applications such as:

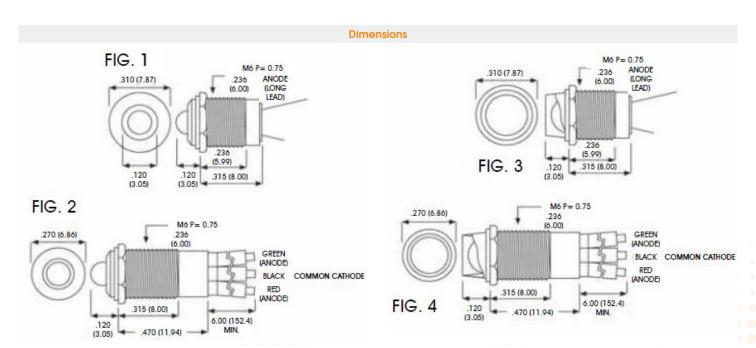
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

and many more!

#### **Certifications & Ratings**

• RoHS Compliant

Specifications Specification Specific						
Voltage Options:	2 V DC (resistor required)	Housing:	Chrome plated brass			
	6 and 12 V DC - Bi-color (no resistor required)	Terminals:	Through hole leads			
Operating Temp:	-25°C to +85°C (-13°F to +185°F)	Wire Leads:	6" on Bi-color only			
Storage Temp:	-25°C to +100°C (-13°F to +212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Through hole and 24AWG wire leads (Bi-color only)	Nut:	Brass-Nickel Plated			



# **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity* (mcd)	LED Position	Finish	Figure
606-1111-110F	Red	2	5	8	Protruding	Chrome	1
606-1211-110F	Green	2	15	30	Protruding	Chrome	1
606-1311-110F	Yellow	2	15	30	Protruding	Chrome	1
606-1215-110F	Green	2	15	30	Protruding	Chrome	1 w/ Wire Leads
606-1415-110F	Red/Green	2	10	35/18	Protruding	Chrome	2
606-1415-120F	Red/Green	6	10	35/18	Protruding	Chrome	2
606-1415-130F	Red/Green	12	10	35/18	Protruding	Chrome	2
606-2111-110F	Red	2	5	8	Recess	Chrome	3
606-2211-110F	Green	2	15	30	Recess	Chrome	3
606-2311-110F	Yellow	2	15	30	Recess	Chrome	3
606-2415-110F	Red/Green	2	10	35/18	Recess	Chrome	4
606-2415-120F	Red/Green	6	10	35/18	Recess	Chrome	4
606-2415-130F	Red/Green	12	10	35/18	Recess	Chrome	4

<sup>\*</sup>Bi-color intensity (RED/GREEN)

#### **7mm Panel Mount Indicators**



Mechanical information					
Mounting Hole Size:	0.283" (7.2 mm)				
Max Panel Thickness:	See part numbers				
Mounting Torque:	0.362 lbs/ft (5 kg/cm) 0.217 lbs/ft or 3 kg/cm (Figure 5 only)				

#### **Application:**

The 607 Series LED Panel Mount Indicators are designed for a variety of applications such as:

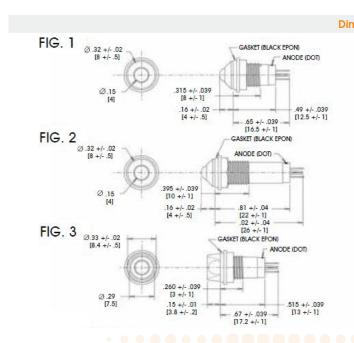
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

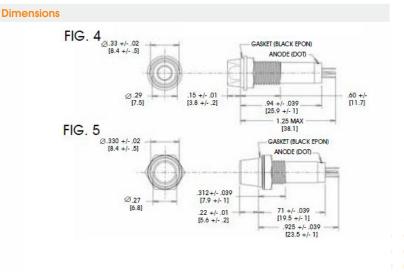
and many more!

#### **Certifications & Ratings**

- RoHS Compliant
- NEMA 4X/IP66 (Water tight version only)

	Specifications		
Voltage Options:	2 V DC (resistor required);	Housing:	Protruding & recessed positions: Chrome plated brass; internal position: Polycarbonate
	6, 12 & 24 V DC (no resistor required)	Terminals:	Copper-Nickel Plated
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Lock Washer:	Iron-Nickel Plated
Storage Temp:	-40°C to +85°C (-40°F to +185°F)	Nut:	Brass-Nickel Plated
Electrical Connection:	Solder terminals		





# **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	LED Positions	Figure	Panel Thickness
			Stand	ard Versions			
607-1112-110F	Red	2	15	22	Protuding	1	
607-1212-110F	Green	2	15	50	Protuding	1	0.187" (4.75mm)
607-1312-110F	Yellow	2	15	66	Protuding	1	(4.7011111)
607-1112-120F	Red	6	15	22	Protuding	2	
607-1212-120F	Green	6	15	50	Protuding	2	
607-1312-120F	Yellow	6	15	66	Protuding	2	0.265"
607-1112-130F	Red	12	15	22	Protuding	2	(6.75mm)
607-1212-130F	Green	12	15	50	Protuding	2	
607-1312-130F	Yellow	12	15	66	Protuding	2	
607-2112-110F	Red	2	15	22	Recessed	3	
607-2212-110F	Green	2	15	50	Recessed	3	0.136" (8.50mm)
607-2312-110F	Yellow	2	15	66	Recessed	3	(0.5011111)
607-2112-120F	Red	6	15	22	Recessed	4	
607-2212-120F	Green	6	15	50	Recessed	4	
607-2312-120F	Yellow	6	15	66	Recessed	4	0,336"
607-2112-130F	Red	12	15	22	Recessed	4	(8.50mm)
607-2212-130F	Green	12	15	50	Recessed	4	
607-2312-130F	Yellow	12	15	66	Recessed	4	
607-3132-120F	Red	6	15	20	Internal	5	
607-3232-120F	Green	6	15	45	Internal	5	
607-3332-120F	Yellow	6	15	60	Internal	5	
607-3132-130F	Red	12	15	20	Internal	5	
607-3232-130F	Green	12	15	45	Internal	5	0.187"
607-3332-130F	Yellow	12	15	60	Internal	5	(4.75mm)
607-3132-140F	Red	24	15	20	Internal	5	
607-3232-140F	Green	24	15	45	Internal	5	
607-3332-140F	Yellow	24	15	60	Internal	5	

<sup>\*</sup>For watertight versions: replace 8th digit with "3". For example: 607-111 $\underline{\textbf{2}}$ -301F

#### **8mm Panel Mount Indicators**



Mechanical information					
Mounting Hole Size:	0.327" (8.3 mm) (Fig. 1 & 2);				
	0.335" (8.5 mm) (Fig. 3 & 4)				
Max Panel Thickness:	See part numbers				
Mounting Torque:	0.217 lbs/ft or 3 kg/cm (Fig. 1 & 2 only)				

#### **Application:**

The 608 Series LED Panel Mount Indicators are designed for a variety of applications such as:

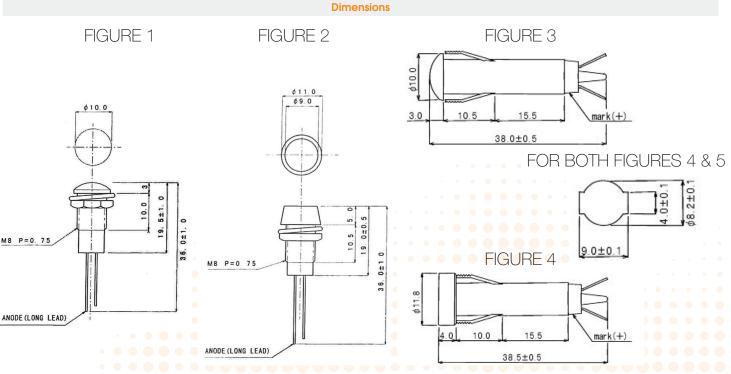
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

and many more!

#### **Certifications & Ratings**

RoHS Compliant

Specifications Specification Specific						
Voltage Options:	2 V DC (resistor required);	Housing:	Polycarbonate			
	6, 12 & 24 V DC (no resistor required)	Terminals:	Copper-Nickel Plated			
Operating Temp:	-25°C to +85°C (-13°F to +185°F)	Lock Washer:	Iron-Nickel Plated			
Storage Temp:	-25°C to +85°C (-13°F to +185°F)	Nut:	Brass-Nickel Plated			
Electrical Connection:	Leads (Fig. 1 & 2), Solder terminals (Fig. 3 & 4)					



# **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)	Figure	Panel Thickness
		Lock Wo	isher & Nut			
608-1131-110F	Red	2	15	20	1	
608-1231-110F	Green	2	15	15	1	
608-1331-110F	Yellow	2	15	4	1	0.236"
608-3131-110F	Red	2	15	20	2	(6mm)
608-3231-110F	Green	2	15	15	2	
608-3331-110F	Yellow	2	15	4	2	
		\$n	ap-Fit			
608-1132-220F	Red	6	15	60	3	
608-1232-220F	Green	6	15	110	3	
608-1332-220F	Yellow	6	15	90	3	
608-1132-230F	Red	12	15	60	3	
608-1232-230F	Green	12	15	110	3	
608-1332-230F	Yellow	12	15	90	3	
608-1132-240F	Red	24	15	60	3	
608-1232-240F	Green	24	15	110	3	
608-1332-240F	Yellow	24	15	90	3	0.197"
608-2132-220F	Red	6	15	60	4	(5mm)
608-2232-220F	Green	6	15	110	4	
608-2332-220F	Yellow	6	15	90	4	
608-2132-230F	Red	12	15	60	4	
608-2232-230F	Green	12	15	110	4	
608-2332-230F	Yellow	12	15	90	4	
608-2132-240F	Red	24	15	60	4	
608-2232-240F	Green	24	15	110	4	
608-2332-240F	Yellow	24	15	90	4	

#### **9mm Panel Mount Indicators**



MACC	han		in	formo	ttion.
INIEC	HUH	ıcuı			

Mounting Hole Size: 0.368" (9.35 mm) Max Panel Thickness: 0.378" (9.5 mm); with Gasket: 0.318" (8.0 mm)

**Mounting Torque:** 0.362 lbs/ft (5 kg/cm)

#### **Application:**

The 609 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

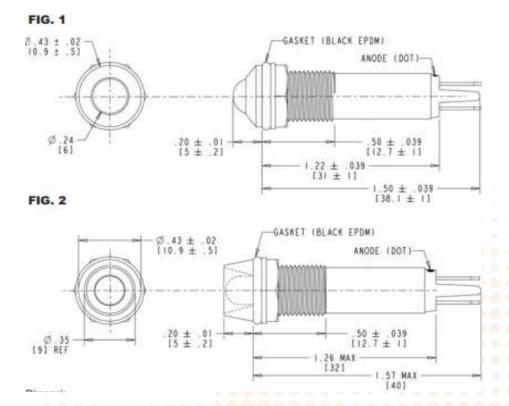
and many more!

#### **Certifications & Ratings**

- RoHS Compliant
- NEMA 4X
- IP66 (water tight models only)

Specifications Specification Specificat						
Voltage Options:	6, 12 & 24 V DC (no resistor required)	Housing:	Chrome or black plated brass			
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Terminals:	Copper-Nickel Plated			
Storage Temp:	-40°C to +85°C (-40°F to +185°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Solder terminals	Nut:	Brass-Nickel Plated			

#### **Dimensions**



# **Ordering Information**

Part Number*	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	LED Position	Figure
		Stan	dard Models	(mod)		
609-1122-120F	Red	6	15	60	Protruding	1
609-1222-120F	Green	6	15	110	Protruding	1
609-1322-120F	Yellow	6	15	90	Protruding	1
609-1122-130F	Red	12	15	60	Protruding	1
609-1222-130F	Green	12	15	110	Protruding	1
609-1322-130F	Yellow	12	15	90	Protruding	1
609-1122-140F	Red	24	15	60	Protruding	1
609-1222-140F	Green	24	15	110	Protruding	1
609-1322-140F	Yellow	24	15	90	Protruding	1
609-2122-120F	Red	6	15	60	Recessed	2
609-2222-120F	Green	6	15	110	Recessed	2
609-2322-120F	Yellow	6	15	90	Recessed	2
609-2122-130F	Red	12	15	60	Recessed	2
609-2222-130F	Green	12	15	110	Recessed	2
609-2322-130F	Yellow	12	15	90	Recessed	2
609-2122-140F	Red	24	15	60	Recessed	2
609-2222-140F	Green	24	15	110	Recessed	2
609-2322-140F	Yellow	24	15	90	Recessed	2
		Wate	ertight Models			
609-1122-320F	Red	6	15	60	Protruding	1
609-1222-320F	Green	6	15	110	Protruding	1
609-1322-320F	Yellow	6	15	90	Protruding	1
609-1122-330F	Red	12	15	60	Protruding	1
609-1222-330F	Green	12	15	110	Protruding	1
609-1322-330F	Yellow	12	15	90	Protruding	1
609-1122-340F	Red	24	15	60	Protruding	1
609-1222-340F	Green	24	15	110	Protruding	1
609-1322-340F	Yellow	24	15	90	Protruding	1
609-2122-320F	Red	6	15	60	Recessed	2
609-2222-320F	Green	6	15	110	Recessed	2
609-2322-320F	Yellow	6	15	90	Recessed	2
609-2122-330F	Red	12	15	60	Recessed	2
609-2222-330F	Green	12	15	110	Recessed	2
609-2322-330F	Yellow	12	15	90	Recessed	2
609-2122-340F	Red	24	15	60	Recessed	2
609-2222-340F	Green	24	15	110	Recessed	2
609-2322-340F	Yellow	24	15	90	Recessed	2

<sup>\*</sup>Part numbers are black nickle plated \*Also available in chrome-plated brass housing by inserting a "1" into the 6th position Ex:  $609-11\underline{1}2-120F$ 

#### 10mm Panel Mount Indicators



Mechanical information					
Mounting Hole Size: 0.406" (10.3 mm)					
Max Panel Thickness:	0.236" (6.0 mm)				
Mounting Torque: 0.217 lbs/ft (3 kg/cm)					

#### **Application:**

The 610 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

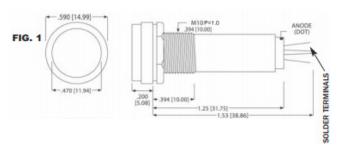
and many more!

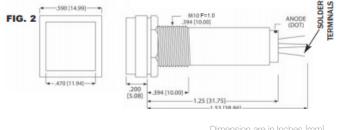
#### **Certifications & Ratings**

• RoHS Compliant

Specifications Specification Specific						
Voltage Options:	6V DC (no resistor required)	Housing:	Polycarbonate			
Operating Temp:	-25°C to +85°C (-13°F to +185°F)	Terminals:	Copper-Nickle Plated			
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection	Solder terminals	Nut:	Brass-Nickel Plated			

#### **Dimensions**





Dimension are in Inches [mm]

Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	LED Shape	Housing	Figure
610-3132-120F	Red	6	15	60	Round	Polycarbonate	1
610-3232-120F	Green	6	15	110	Round	Polycarbonate	1
610-3332-120F	Yellow	6	15	90	Round	Polycarbonate	1
610-4132-120F	Red	6	15	60	Square	Polycarbonate	2
610-4232-120F	Green	6	15	110	Square	Polycarbonate	2
610-4332-120F	Yellow	6	15	90	Square	Polycarbonate	2

#### 12mm Panel Mount Indicators



# Mechanical information Mounting Hole Size: 0.492" (12.5 mm) Max Panel Thickness: 0.236" (6.3 mm) Mounting Torque: 0.217 lbs/ft (3 kg/cm)

#### **Application:**

The 612 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

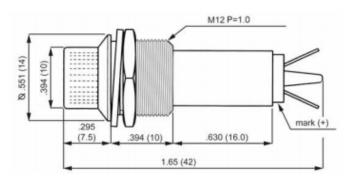
and many more!

#### **Certifications & Ratings**

• RoHS Compliant

Specifications Specification Specific						
Voltage Options:	6, 12, and 24V DC (no resistor required)	Housing:	Polycarbonate			
Operating Temp:	-25°C to +85°C (-13°F to +185°F)	Terminals	Copper-Nickle Plated			
Storage Temp:	-25°C to +100°C (-13°F to +212°F)	Lock Washer:	Iron-Nickle Plated			
Electrical Connection:	Solder terminals	Nut:	Brass-Nickle Plated			

#### **Dimensions**



Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)
612-3132-120F	Red	6	15	60
612-3232-120F	Green	6	15	110
612-3332-120F	Yellow	6	15	90
612-3132-130F	Red	12	15	60
612-3232-130F	Green	12	15	110
612-3332-130F	Yellow	12	15	90
612-3132-140F	Red	24	15	60
612-3232-140F	Green	24	15	110
612-3332-140F	Yellow	24	15	90

# **16mm Panel Mount Indicators**



Mechanical information					
Mounting Hole Size: 0.642" (16.3mm)					
Max Panel Thickness:	0.236" (6.3 mm)				
Mounting Torque: 0.217 lbs/ft (3 kg/cm)					

#### **Application:**

The 616 Series LED Panel Mount Indicators are designed for a variety of applications such as:

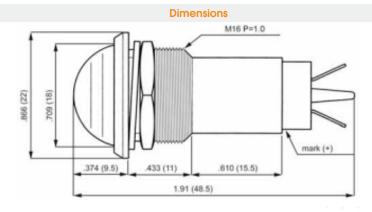
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

and many more!

#### **Certifications & Ratings**

RoHS compliant

Specifications Specification Specificat						
Voltage Options:	6, 12, and 24V DC (no resistor required)	Housing:	Polycarbonate			
Operating Temp:	-25°C to +85°C (-13°F to +185°F)	Terminals:	Copper-Nickel Plated			
Storage Temp:	-25°C to +100°C (-13°F to +212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Solder Terminals	Nut:	Brass-Nickel Plated			



Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)
616-1132-120F	Red	6	15	60
616-1232-120F	Green	6	15	110
616-1332-120F	Yellow	6	15	90
616-1132-130F	Red	12	15	60
616-1232-130F	Green	12	15	110
616-1332-130F	Yellow	12	15	90
616-1132-140F	Red	24	15	60
616-1232-140F	Green	24	15	110
616-1332-140F	Yellow	24	15	90

# **High Intensity LED Panel Mount Indicators**



Mechanical information						
Mounting Hole Size: 0.500" (12.7mm)						
Max Panel Thickness:	0.450" (11.43mm)					
Mounting Torque: 5 in-lbs						

#### Application:

The 656 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Safety Applications
- Instrument Panels
- Vending/Gaming
- Display Lighting
- Transportation rail, bus, airline

and many more!

#### **Certifications & Ratings**

- UL1598: wire leads UL listed; terminals UL recognized
- NEMA 4X
- IP/67
- RoHS compliant w/6C exemption

Specifications Specification Specificatio							
Voltage Options:	5 to 125V DC and 125, 230V AC (Bi-color 5, 12, 24V DC)	Lens Material:	Transparent polycarbonate (UL 94V-0)				
Operating Temp:	-30°C to +85°C (22°F to +185°F)	Wire Leads:	18 AWG				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	White Nickel Plated Bronze				
Electrical Connection:	110 Faston quick connect terminals or 6" wire leads	Nut:	White Nickel Plated Brass				
Housing:	White Nickel Plated Brass, other plating options available						

# 

# **Ordering Information**

Part Number	Lens Style	Color	Voltage	Voltage Type	Typ Current	Typical Intensity
			· ·		(mA)	(mcd)
656-1002-303F	FLAT	WHITE	5	V DC	15	1510
656-1102-303F	FLAT	RED	5	V DC	16	1150
656-1202-303F	FLAT	GREEN	5	V DC	15	1600
656-1302-303F	FLAT	YELLOW	5	VDC	16	990
656-1402-303F	FLAT	BLUE	5	V DC	15	237
656-1122-303F	FLAT	RED/GREEN	5	V DC	11/8	330/910
656-1322-303F	FLAT	YELLOW/GREEN	5	V DC	11/8	320/864
656-1003-303F	FLAT	WHITE	12	V DC	18	1310
656-1103-303F	FLAT	RED	12	V DC	18	1100
656-1203-303F	FLAT	GREEN	12	V DC	16	1140
656-1303-303F	FLAT	YELLOW	12	V DC	18	880
656-1403-303F	FLAT	BLUE	12	V DC	16	290
656-1123-303F	FLAT	RED/GREEN	12	V DC	10/9	330/910
656-1323-303F	FLAT	YELLOW/GREEN	12	V DC	10/9	320/864
656-1004-303F	FLAT	WHITE	24	V DC	20	1310
656-1104-303F	FLAT	RED	24	V DC	20	1100
656-1204-303F	FLAT	GREEN	24	V DC	20	1140
656-1304-303F	FLAT	YELLOW	24	V DC	20	880
656-1404-303F	FLAT	BLUE	24	V DC	20	290
656-1124-303F	FLAT	RED/GREEN	24	V DC	11/10	330/910
656-1324-303F	FLAT	YELLOW/GREEN	24	V DC	11/10	320/864
656-1006-303F	FLAT	WHITE	28	V DC	19	1310
656-1106-303F	FLAT	RED	28	V DC	19	1100
656-1206-303F	FLAT	GREEN	28	V DC	18	1140
656-1306-303F	FLAT	YELLOW	28	V DC	19	880
656-1406-303F	FLAT	BLUE	28	V DC	18	290
656-1008-303F	FLAT	WHITE	37.5	V DC	8.5	400
656-1108-303F	FLAT	RED	37.5	V DC	8.5	230
656-1208-303F	FLAT	GREEN	37.5	V DC	8.5	450
656-1308-303F	FLAT	YELLOW	37.5	V DC	8.5	190
656-1408-303F	FLAT	BLUE	37.5	V DC	8.5	100
656-1007-303F	FLAT	WHITE	72	V DC	8.5	400
656-1107-303F	FLAT	RED	72	V DC	8.5	230
656-1207-303F	FLAT	GREEN	72	V DC	8.5	450
656-1307-303F	FLAT	YELLOW	72	V DC	8.5	190
656-1407-303F	FLAT	BLUE	72	V DC	8.5	100
656-1005-303F	FLAT	WHITE	120	V AC/DC	5	400
656-1105-303F	FLAT	RED	120	V AC/DC	5	230
656-1205-303F	FLAT	GREEN	120	V AC/DC	5	450
656-1305-303F	FLAT	YELLOW	120	V AC/DC	5	190
656-1405-303F	FLAT	BLUE	120	V AC/DC	5	100

<sup>\*</sup>For blade terminals: replace the 10th digit with "4". For example: 656-1103-304F

Part Number	Lens Style	Color	Voltage	Voltage Type	Typ Current (mA)	Typical Intensity (mcd)
656-1009-303F	FLAT	WHITE	230	V AC	3	400
656-1109-303F	FLAT	RED	230	V AC	3	230
656-1209-303F	FLAT	GREEN	230	V AC	3	450
656-1309-303F	FLAT	YELLOW	230	V AC	3	190
656-1409-303F	FLAT	BLUE	230	V AC	3	100
656-3002-303F	DOME	WHITE	5	V DC	15	3080
656-3102-303F	DOME	RED	5	V DC	16	2200
656-3202-303F	DOME	GREEN	5	V DC	15	2880
656-3302-303F	DOME	YELLOW	5	V DC	16	1960
656-3402-303F	DOME	BLUE	5	V DC	15	600
656-3122-303F	DOME	RED/GREEN	5	V DC	11/8	490/1340
656-3322-303F	DOME	YELLOW/GREEN	5	V DC	11/8	480/430
656-3003-303F	DOME	WHITE	12	V DC	18	2340
656-3103-303F	DOME	RED	12	V DC	18	2000
656-3203-303F	DOME	GREEN	12	V DC	16	2110
656-3303-303F	DOME	YELLOW	12	V DC	18	1080
656-3403-303F	DOME	BLUE	12	V DC	16	640
656-3123-303F	DOME	RED/GREEN	12	V DC	10/9	490/1340
656-3323-303F	DOME	YELLOW/GREEN	12	V DC	10/9	480/430
656-3004-303F	DOME	WHITE	24	V DC	20	2340
656-3104-303F	DOME	RED	24	V DC	20	2000
656-3204-303F	DOME	GREEN	24	V DC	20	2110
656-3304-303F	DOME	YELLOW	24	V DC	20	1080
656-3404-303F	DOME	BLUE	24	V DC	20	640
656-3124-303F	DOME	RED/GREEN	24	V DC	11/10	490/1340
656-3324-303F	DOME	YELLOW/GREEN	24	V DC	11/10	480/430
656-3006-303F	DOME	WHITE	28	V DC	19	2340
656-3106-303F	DOME	RED	28	V DC	19	2000
656-3206-303F	DOME	GREEN	28	V DC	18	2110
656-3306-303F	DOME	YELLOW	28	V DC	19	1080
656-3406-303F	DOME	BLUE	28	V DC	18	640
656-3008-303F	DOME	WHITE	37.5	V DC	8.5	660
656-3108-303F	DOME	RED	37.5	V DC	8.5	410
656-3208-303F	DOME	GREEN	37.5	V DC	8.5	800
656-3308-303F	DOME	YELLOW	37.5	V DC	8.5	390
656-3408-303F	DOME	BLUE	37.5	V DC	8.5	220
656-3007-303F	DOME	WHITE	72	V DC	8.5	660
656-3107-303F	DOME	RED	72	V DC	8.5	410

<sup>\*</sup>For blade terminals: replace the 10th digit with "4". For example: 656-1103-304F

Part Number	Lens Style	Color	Voltage	Voltage Type	Typ Current (mA)	Typical Intensity (mcd)
656-3207-303F	DOME	GREEN	72	V DC	8.5	800
656-3307-303F	DOME	YELLOW	72	V DC	8.5	390
656-3407-303F	DOME	BLUE	72	V DC	8.5	220
656-3005-303F	DOME	WHITE	120	V AC/DC	5	660
656-3105-303F	DOME	RED	120	V AC/DC	5	410
656-3205-303F	DOME	GREEN	120	V AC/DC	5	800
656-3305-303F	DOME	YELLOW	120	V AC/DC	5	390
656-3405-303F	DOME	BLUE	120	V AC/DC	5	220
656-3009-303F	DOME	WHITE	230	V AC	2	660
656-3109-303F	DOME	RED	230	V AC	3	410
656-3209-303F	DOME	GREEN	230	V AC	3	800
656-3309-303F	DOME	YELLOW	230	V AC	3	390
656-3409-303F	DOME	BLUE	230	V AC	3	220

<sup>\*</sup>For blade terminals: replace the 10th digit with "4". For example: 656-1103-304F

# **Watertight Right Angle Panel Mount Indicators**



#### **Mechanical information**

Mounting Hole Size: 0.687" (17.46 mm)

Max Panel Thickness: 0.350" (8.89 mm)

Mounting Torque: 15 in-lbs

#### Application:

The 657 Series LED Panel Mount Indicators are designed with a highly durable watertight housing. These indicators are designed for a variety of applications such as:

- Instrument Panels
- Gauge
- Dash Boards
- Storage Compartments
- Control Panels
- ...and many more!

#### **Certifications & Ratings**

- RoHS compliant
- NEMA 4X
- IP67

Specifications Specification Specificatio							
Voltage Options:	12-32 V DC		Lens Material:	Transparent polycarbonate (UL 94V-0)			
Operating Temp:	-35°C to +65°C (-31°F to +149°F)		Wire Leads:	6"			
Storage Temp:	-40°C to +100°C (-40°F to +212°F)		Lock Washer:	White Nickel Plated Bronze			
Electrical Connection:	18 AWG anti-capillary wire		Nut:	White Nickel Plated Brass			
Housing:	Polycarbonate (UL 94V-0)						

# Dimensions | Max. Parel Thickness: .359 | Mis. Spacing (10 ft. 1.000 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 | 17, 140, 21 |

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)
657-3009-213F	Cool White	12-32	24	2000
657-3009-803F	Green	12-32	24	1960
657-3009-804F	Red	12-32	24	1680
657-3009-806F	Blue	12-32	24	880

### **Watertight Series Panel Mount Indicators**



Mechanical information					
Mounting Hole Size: 0.687" (17.46 mm)					
Max Panel Thickness:	0.350" (8.89 mm)				
Mounting Torque:	15 in-lbs				

#### **Application:**

The 657 Series LED Panel Mount Indicators are designed with a highly durable watertight housing. These indicators are designed for a variety of applications such as:

- Electrical control panels
- Wastewater treatment controls
- Buses and transit vehicles dashboards
- Agricultural and construction equipment dashboards
- · Aircraft and military vehicles dashboards
- Status Indication on industrial equipment

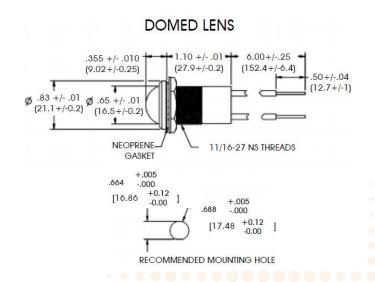
...and many more!

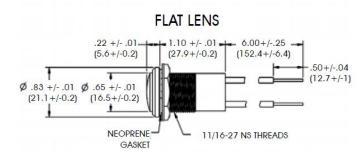
#### **Certifications & Ratings**

- RoHS compliant
- NEMA 4X
- IP67

Specifications Specification Specific						
Voltage Options:	5, 12, and 24 V DC	Lens Material:	Polycarbonate (UL 94V-0)			
Operating Temp:	-35°C to +65°C (-31°F to +149°F)	Wire Leads:	6"			
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	White Nickel Plated Bronze			
Electrical Connection:	18 AWG anti-capillary wire	Nut:	White Nickel Plated Brass			
Housing:	Polycarbonate (UL 94V-0)					

#### **Dimensions**





Part Number	Lens Style	Lamp Color	Voltage (V DC)	Lens Color	Current (mA)	Typical Luminance (mcd)
657-1002-303F	Flat	White	5	White Diffused	20	80
657-1502-103F	Flat	Red	5	Tinted Diffused	20	280
657-1602-103F	Flat	Green	5	Tinted Diffused	20	280
657-1702-103F	Flat	Yellow	5	Tinted Diffused	20	280
657-1802-103F	Flat	Blue	5	Tinted Diffused	20	100
657-1902-103F	Flat	Orange	5	Tinted Diffused	20	380
657-1003-303F	Flat	White	12	White Diffused	20	80
657-1503-103F	Flat	Red	12	Tinted Diffused	20	280
657-1603-103F	Flat	Green	12	Tinted Diffused	20	280
657-1703-103F	Flat	Yellow	12	Tinted Diffused	20	280
657-1803-103F	Flat	Blue	12	Tinted Diffused	20	100
657-1903-103F	Flat	Orange	12	Tinted Diffused	20	380
657-1004-303F	Flat	White	24	White Diffused	20	80
657-1504-103F	Flat	Red	24	Tinted Diffused	20	280
657-1604-103F	Flat	Green	24	Tinted Diffused	20	280
657-1704-103F	Flat	Yellow	24	Tinted Diffused	20	280
657-1804-103F	Flat	Blue	24	Tinted Diffused	20	100
657-1904-103F	Flat	Orange	24	Tinted Diffused	20	380
657-2002-303F	Dome	White	5	White Diffused	20	80
657-2502-103F	Dome	Red	5	Tinted Diffused	20	320
657-2602-103F	Dome	Green	5	Tinted Diffused	20	320
657-2702-103F	Dome	Yellow	5	Tinted Diffused	20	320
657-2802-103F	Dome	Blue	5	Tinted Diffused	20	140
657-2902-103F	Dome	Orange	5	Tinted Diffused	20	550
657-2003-303F	Dome	White	12	White Diffused	20	80
657-2503-103F	Dome	Red	12	Tinted Diffused	20	320
657-2603-103F	Dome	Green	12	Tinted Diffused	20	320
657-2703-103F	Dome	Yellow	12	Tinted Diffused	20	320
657-2803-103F	Dome	Blue	12	Tinted Diffused	20	140
657-2903-103F	Dome	Orange	12	Tinted Diffused	20	550
657-2004-303F	Dome	White	24	White Diffused	20	80
657-2504-103F	Dome	Red	24	Tinted Diffused	20	320
657-2604-103F	Dome	Green	24	Tinted Diffused	20	320
657-2704-103F	Dome	Yellow	24	Tinted Diffused	20	320
657-2804-103F	Dome	Blue	24	Tinted Diffused	20	140
657-2904-103F	Dome	Orange	24	Tinted Diffused	20	550

<sup>\*</sup>For non-diffused lens: replace 8th digit with "3" for example: 657-1502-303F

### **5mm Panel Mount Indicator**



Mechanical information					
Mounting Hole Size: 0.2047" (5.2mm)					
Max Panel Thickness:	0.138" (3.5mm)				
Mounting Torque:	0.362" lbs/ft (5 kg/cm)				

#### **Application:**

The 675 Series LED Panel Mount Indicators are designed for a variety of applications such as:

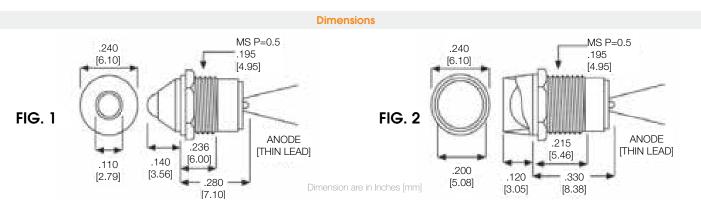
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

...and many more!

#### **Certifications & Ratings**

RoHS compliant

Specifications Specification Specific							
Operating Voltage:	2 (red, orange) & 3.3 (green, blue) V DC	Housing:	Chrome plated brass				
	(current limiting resistor required on both voltages)	Terminal:	Copper-Nickel Plated				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)	Lock Washer:	Iron-Nickel Plated				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Nut:	Brass-Nickel Plated				
<b>Electrical Connection</b>	Through leads						



Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity(mcd)	LED Position	Figure
675-1111-110F	Red	2	20	9110	Protruding	1
675-1211-110F	Green	3.3	20	11380	Protruding	1
675-1311-110F	Orange	2	20	9110	Protruding	1
675-1411-110F	Blue	3.3	20	2810	Protruding	1
675-1511-110F	White	3.3	20	5100	Protruding	1
675-2111-110F	Red	2	20	5650	Recessed	2
675-2211-110F	Green	3.3	20	11520	Recessed	2
675-2311-110F	Orange	2	20	7810	Recessed	2
675-2411-110F	Blue	3.3	20	3810	Recessed	2
675-2511-110F	White	3.3	20	6220	Recessed	2

### **6mm Panel Mount Indicator**



Mechanical information					
Mounting Hole Size:	0.244" (6.2mm)				
Max Panel Thickness:	0.138" (3.5mm)				
Mounting Torque:	0.362 lbs/ft (5 kg/cm)				

#### **Application:**

The 676 Series LED Panel Mount Indicators are designed with a highly durable watertight housing. These indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

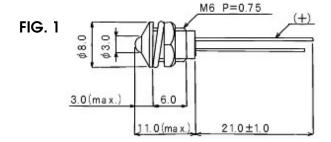
...and many more!

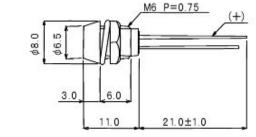
#### **Certifications & Ratings**

• RoHS compliant

FIG. 2

Specifications Specification Specificat							
Operating Voltage:	2 (red,orange) & 3.3 (green, blue) V DC (current limiting resistor required on both voltages)	Housing:	Chrome plated brass				
Operating Temp:	-22°F to +185°F (-30°C to +85°F)	Terminal:	Copper-Nickel Plated				
Storage Temp:	-40°F to +212°F (-40°C to +100°C)	Lock Washer:	Iron-Nickel Plated				
Electrical Connection	Through leads	Nut:	Brass-Nickel Plated				





Dimension are in Inches [mm]

Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	LED Position	Figure
676-1111-110F	Red	2	20	7720	Protruding	1
676-1211-110F	Green	3.3	20	10100	Protruding	1
676-1311-110F	Orange	2	20	7810	Protruding	1
676-1411-110F	Blue	3.3	20	2980	Protruding	1
676-1511-110F	White	3.3	20	6150	Protruding	1
676-2111-110F	Red	2	20	5650	Recessed	2
676-2211-110F	Green	3.3	20	11520	Recessed	2
676-2311-110F	Orange	2	20	7810	Recessed	2
676-2411-110F	Blue	3.3	20	3810	Recessed	2
676-2511-110F	White	3.3	20	6220	Recessed	2

### **7mm Panel Mount Indicator**



Mechanical information						
Mounting Hole Size:	0.283" (7.2mm)					
Max Panel Thickness: See part numbers						
Mounting Torque:	0.362 lbs/ft (5 kg/cm); 0.217 lbs/ft or 3kg/cm (Fig 3)					

#### **Application:**

The 677 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

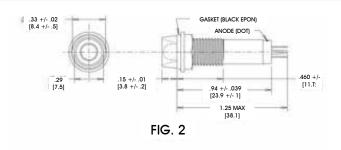
...and many more!

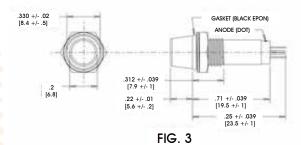
#### **Certifications & Ratings**

- RoHS compliant
- NEMA 4X
- IP66 (water tight)

Specifications Specification Specific						
Operating Voltage:	6, 12 & 24 V DC (no resistor required)	Housing:	Protruding & recessed positions: Chrome plated brassl Internal position: Polycarbonate			
Operating Temp:	-20°C to +75°C (-4°F to 167°F)	Terminal:	Copper-Nickel Plated			
Storage Temp:	-40°C to +100°C (-40°F to 212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Solder terminals and 6" wire leads	Nut:	Brass-Nickel Plated			

### 





Dimension are in Inches Imn

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)	LED Position	Figure	Panel Thickness
677-1112-321F	Red	6	30	825	Protuding	1	
677-1212-322F	Green	6	30	4135	Protuding	1	
677-1312-323F	Orange	6	30	560	Protuding	1	
677-1412-324F	Blue	6	30	700	Protuding	1	
677-1112-331F	Red	12	30	825	Protuding	1	
677-1212-332F	Green	12	30	4135	Protuding	1	0.265"
677-1312-333F	Orange	12	30	560	Protuding	1	(6.75 mm)
677-1412-334F	Blue	12	30	700	Protuding	1	
677-1112-341F	Red	24	30	825	Protuding	1	
677-1212-342F	Green	24	30	4135	Protuding	1	
677-1312-343F	Orange	24	30	560	Protuding	1	
677-1412-344F	Blue	24	30	700	Protuding	1	
677-2112-321F	Red	6	30	925	Recessed	2	
677-2312-322F	Green	6	30	4135	Recessed	2	
677-2312-323F	Orange	6	30	600	Recessed	2	
677-2412-324F	Blue	6	30	730	Recessed	2	
677-2112-331F	Red	12	30	925	Recessed	2	
677-2212-332F	Green	12	30	4135	Recessed	2	0.336"
677-2312-333F	Orange	12	30	600	Recessed	2	(8.50 mm)
677-2412-334F	Blue	12	30	730	Recessed	2	
677-2112-341F	Red	24	30	925	Recessed	2	
677-2212-342F	Green	24	30	4135	Recessed	2	
677-2312-343F	Orange	24	30	600	Recessed	2	
677-2412-344F	Blue	24	30	730	Recessed	2	
677-3132-321F	Red	6	30	1370	Internal	3	
677-3232-322F	Green	6	30	5500	Internal	3	
677-3332-323F	Orange	6	30	1280	Internal	3	
677-3432-324F	Blue	6	30	1200	Internal	3	
677-3132-331F	Red	12	30	1370	Internal	3	
677-3232-332F	Green	12	30	5500	Internal	3	0.187"
677-3332-333F	Orange	12	30	1280	Internal	3	(4.75 mm)
677-3432-334F	Blue	12	30	1200	Internal	3	
677-3132-341F	Red	24	30	1370	Internal	3	
677-3232-342F	Green	24	30	5500	Internal	3	
677-3332-343F	Orange	24	30	1280	Internal	3	
677-3432-344F	Blue	24	30	1200	Internal	3	

<sup>\*</sup> For wire leads: replace 7th digit with "5" for example 677-111 $\underline{\mathbf{5}}$ -321F

### **8mm Panel Mount Indicator**



ı	Mechanical information				
Mounting Hole Size:	0.335" (8.5mm) (Fig. 1)				
	0.323" (8.2mm); See Fig. 4A (Fig 4 & 5)				
Max Panel Thickness:	See part numbers				
Mounting Torque:	0.362 lbs/ft (5 kg/cm) (Fig. 1)				
	0.271 lbs/ft (3 kg/cm) (Fig. 2 and 3)				

#### **Application:**

The 678 Series LED Panel Mount Indicators are designed for a variety of applications such as:

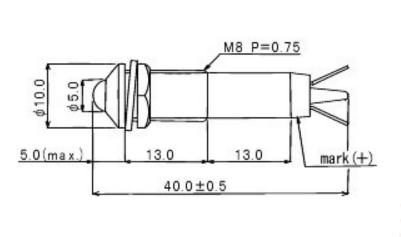
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation
- ...and many more!

#### **Certifications & Ratings**

- RoHS compliant
- IP66 (protruding types only)

<b>Specifications</b>					
Operating Voltage:	6, 12 & 24 V DC (no resistor required)	Housing:	Protruding: Chrome plated brass; Internal position: Polycarbonate		
Operating Temp:	-20°C to +75°C (-4°F to 167°F)	Terminal:	Copper-Nickel Plated		
Storage Temp:	-40°C to +100°C (-40°F to 212°F)	Lock Washer:	Iron-Nickel Plated		
Electrical Connection:	Solder terminals and 6" wire leads	Nut:	Brass-Nickel Plated		





Dimension are in Inches [mm]

### FIGURE 2

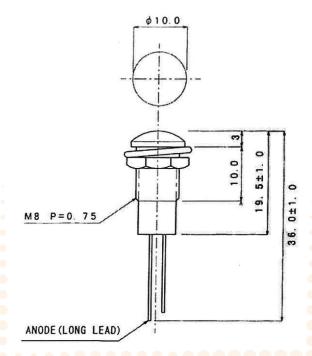


FIGURE 3

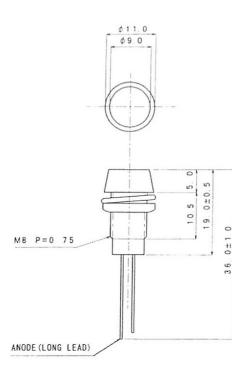


FIGURE 4

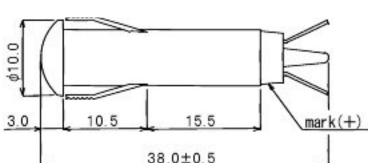
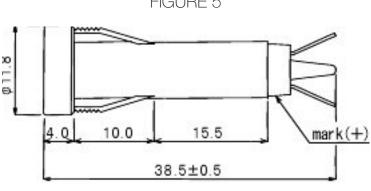
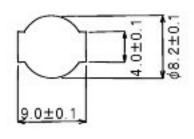


FIGURE 5



FOR BOTH FIGURES 4 & 5



678-1112-321F Red 6 30 320 20 Protucting 1 678-1212-322F Green 6 30 2920 20 Protucting 1 678-1312-325F Oxinge 6 30 490 20 Protucting 1 1 678-1312-325F Oxinge 6 30 490 20 Protucting 1 1 678-1312-331F Red 12 30 320 20 Protucting 1 1 678-1312-331F Red 12 30 320 20 Protucting 1 1 678-1312-331F Red 12 30 320 20 Protucting 1 1 678-1312-331F Red 12 30 490 20 Protucting 1 1 678-1312-334F Blue 12 30 2920 20 Protucting 1 1 678-1312-334F Blue 12 30 200 20 Protucting 1 1 678-1312-334F Red 24 30 320 20 Protucting 1 1 678-1312-345F Oxinge 24 30 490 20 Protucting 1 1 678-1312-345F Oxinge 24 30 490 20 Protucting 1 1 678-1312-345F Blue 24 30 2920 20 Protucting 1 1 678-1311-131-131-131-131-131-131-131-131-1	Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)	Viewing Angel	LED Position	Figure	Panel Thickness
678-1312-323F Orange 6 30 490 20 Protucting 1 678-1412-324F Blue 6 30 220 20 Protucting 1 678-1112-331F Red 12 30 320 20 Protucting 1 678-112-332F Green 12 30 490 20 Protucting 1 678-1312-332F Green 12 30 490 20 Protucting 1 (8.0 mm) 678-1412-334F Blue 12 30 220 20 Protucting 1 (8.0 mm) 678-1412-334F Red 24 30 320 20 Protucting 1 (8.0 mm) 678-1412-343F Red 24 30 320 20 Protucting 1 678-1312-343F Green 24 30 2920 20 Protucting 1 678-1312-343F Green 24 30 2920 20 Protucting 1 678-1312-343F Blue 24 30 2920 20 Protucting 1 678-1312-343F Blue 24 30 220 20 Protucting 1 678-1313-111F Red 2 30 2210 4 Internal 2 678-1313-111F Red 2 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 46860 4 Internal 2 678-1331-111F Green 3.3 30 7100 4 Internal 2 678-3313-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3231-111F Red 2 30 30000 20 Internal 3 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Green 3.3 30 30600 40 Internal 3 678-3331-111F Green 3.3 30 30600 40 Internal 4 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-221F Red 6 30 41430 6 Internal 4 678-1332-221F Red 6 30 41430 6 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-231F Red 24 30 5473 6 Internal 5 Internal 5 678-2332-232F Green 12 30 6480 15 Internal 5 Internal 5 678-2332-232F Green 6 30 12700 5 Internal 5 Internal 5 678-2332-231F Red 12 30 12700 5 Internal 5 Internal 5 678-2332	678-1112-321F	Red	6	30	320	20	Protuding	1	
678-1412-324F Blue 6 30 220 20 Protuding 1 678-1112-331F Red 12 30 320 20 Protuding 1 678-1212-332F Green 12 30 320 20 Protuding 1 3.158* 678-1312-333F Orange 12 30 490 20 Protuding 1 (8.0 mm) 678-1412-334F Blue 12 30 220 20 Protuding 1 (8.0 mm) 678-1412-334F Blue 12 30 220 20 Protuding 1 (8.0 mm) 678-1412-334F Blue 12 30 220 20 Protuding 1 (6.0 mm) 678-1412-334F Blue 24 30 220 20 Protuding 1 (6.0 mm) 678-1412-334F Blue 24 30 2920 20 Protuding 1 (6.0 mm) 678-1412-342F Green 24 30 490 20 Protuding 1 (6.0 mm) 678-1412-343F Orange 24 30 490 20 Protuding 1 (6.0 mm) 678-1412-344F Blue 24 30 220 20 Protuding 1 (6.0 mm) 678-1412-344F Blue 24 30 2210 4 Internal 2 (6.0 mm) 678-1313-111F Red 2 30 2210 4 Internal 2 (6.0 mm) 678-1313-111F Red 2 30 2210 4 Internal 2 (6.0 mm) 678-1331-111F Blue 3.3 30 7100 4 Internal 3 (6.0 mm) 678-3331-111F Green 3.3 30 30600 20 Internal 3 (6.0 mm) 678-3331-111F Green 3.3 30 30600 20 Internal 3 (6.0 mm) 678-1332-221F Red 6 30 2210 5 Internal 4 (6.0 mm) 678-1332-221F Red 6 30 8535 10 Internal 4 (6.0 mm) 678-1332-231F Red 12 30 2410 5 Internal 4 (6.0 mm) 678-1332-231F Red 12 30 2410 5 Internal 4 (6.0 mm) 678-1332-231F Red 12 30 41430 6 Internal 4 (6.0 mm) 678-1332-231F Red 24 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 24 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 24 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 6 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 6 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 6 30 2210 5 Internal 4 (6.0 mm) 678-1332-231F Red 6 30 2210 5 Internal 5 (6.0 mm) 678-1332-231F Red 6 30 2210 5 Internal 5 (6.0 mm) 678-1332-231F Red 6 30 2514 20 Internal 5 (6.0 mm) 678-2332-232F Green 6 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F Green 12 30 16490 15 Internal 5 (6.0 mm) 678-2332-232F G	678-1212-322F	Green	6	30	2920	20	Protuding	1	
678-1112-331F Red 12 30 320 20 Protuding 1 3.3168* 678-1212-332F Green 12 30 2920 20 Protuding 1 (8.0 mm) 678-1312-334F Blue 12 30 220 20 Protuding 1 (8.0 mm) 678-1412-334F Red 24 30 320 20 Protuding 1 (8.0 mm) 678-1412-334F Red 24 30 320 20 Protuding 1 (8.0 mm) 678-1112-341F Red 24 30 320 20 Protuding 1 (8.7 mm) 678-1312-342F Green 24 30 490 20 Protuding 1 (7.8 mm) 678-1312-343F Orange 24 30 490 20 Protuding 1 (7.8 mm) 678-1312-343F Blue 24 30 220 20 Protuding 1 (7.8 mm) 678-1312-344F Blue 24 30 220 20 Protuding 1 (7.8 mm) 678-1311-111F Red 2 30 2210 4 Internal 2 (7.8 mm) 678-131-111F Green 3.3 30 46860 4 Internal 2 (7.8 mm) 678-131-111F Red 2 30 30 2210 4 Internal 2 (7.8 mm) 678-331-111F Red 2 30 3000 40 Internal 3 (7.8 mm) 678-3331-111F Red 2 30 3000 40 Internal 3 (7.8 mm) 678-3331-111F Red 3 30 3000 40 Internal 3 (7.8 mm) 678-3331-114F Blue 3.3 30 4360 40 Internal 3 (7.8 mm) 678-3331-114F Blue 3.3 30 4360 40 Internal 3 (7.8 mm) 678-3332-223F Orange 6 30 2210 5 Internal 4 (7.8 mm) 678-132-221F Red 6 30 2210 5 Internal 4 (7.8 mm) 678-132-223F Green 12 30 41430 6 Internal 4 (7.8 mm) 678-132-223F Green 12 30 41430 6 Internal 4 (7.8 mm) 678-132-224F Blue 6 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Blue 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 4 (7.8 mm) 678-132-224F Red 30 5473 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Green 6 30 14430 6 Internal 5 (7.8 mm) 678-232-222F Red 6 30 12700 5 Internal 5 (7.8 mm) 678-232-222F Green 6 30 16490 15 Internal 5 (7	678-1312-323F	Orange	6	30	490	20	Protuding	1	
678-1212-332F Green 12 30 490 20 Protucting 1 (8.0 mm) 678-1412-334F Blue 12 30 490 20 Protucting 1 (8.0 mm) 678-1412-334F Red 24 30 320 20 Protucting 1 678-1112-341F Red 24 30 220 20 Protucting 1 678-1112-341F Red 24 30 290 20 Protucting 1 678-1212-342F Green 24 30 290 20 Protucting 1 678-1312-345F Orange 24 30 490 20 Protucting 1 678-1312-344F Blue 24 30 220 20 Protucting 1 678-1313-111F Red 2 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 46660 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 7100 4 Internal 2 678-3331-113F Orange 2 30 300 20 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-1332-221F Red 6 30 41430 6 Internal 4 678-1332-222F Green 6 30 41430 6 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-1332-223F Green 12 30 41430 6 Internal 4 678-1332-223F Green 12 30 41430 6 Internal 4 678-1332-223F Red 12 30 2210 5 Internal 4 678-1332-224F Blue 6 30 5473 6 Internal 4 678-1332-224F Blue 12 30 6473 6 Internal 4 678-1332-224F Red 24 30 2210 5 Internal 4 678-1332-224F Red 6 30 8535 10 Internal 4 678-1332-224F Red 6 30 6473 6 Internal 4 678-1332-224F Red 6 30 6473 6 Internal 6 678-2332-224F Green 6 30 12700 5 Internal 5 678-2332-224F Green 6 30 12700 5 Internal 5 678-2332-224F Red 6 30 12700 5 Internal 5 678-2332-224F Red 6 30 12700 5 Internal 5 678-2332-224F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5	678-1412-324F	Blue	6	30	220	20	Protuding	1	
678-1312-333F	678-1112-331F	Red	12	30	320	20	Protuding	1	
678-1412-334F Red 24 30 320 20 Protucting 1 678-1212-342F Red 24 30 320 20 Protucting 1 678-1212-342F Green 24 30 2290 20 Protucting 1 678-1312-343F Orange 24 30 490 20 Protucting 1 678-1312-343F Blue 24 30 220 20 Protucting 1 678-1313-131F Red 2 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 46860 4 Internal 2 678-1331-111F Green 3.3 30 46860 4 Internal 2 678-1331-111F Red 2 30 2210 4 Internal 2 678-1331-111F Red 2 30 2210 4 Internal 2 678-3331-113F Orange 2 30 2210 4 Internal 3 578-3331-111F Green 3.3 30 7100 4 Internal 3 578-3331-111F Green 3.3 30 30000 20 Internal 3 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Red 2 30 3220 40 Internal 3 678-3331-114F Blue 3.3 30 30600 20 Internal 3 678-3331-114F Blue 3.3 30 3260 20 Internal 3 678-3331-114F Blue 3.3 30 4360 40 Internal 3 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-222F Green 6 30 41430 6 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-234F Blue 6 30 5473 6 Internal 4 678-1332-234F Red 12 30 41430 6 Internal 4 678-1332-234F Red 12 30 41430 6 Internal 4 678-1332-234F Red 24 30 2210 5 Internal 4 678-1332-234F Red 24 30 2210 5 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-1332-244F Red 24 30 2210 5 Internal 4 678-1332-244F Red 24 30 2210 5 Internal 4 678-1332-244F Red 24 30 2210 5 Internal 4 678-1332-244F Red 24 30 8535 10 Internal 4 678-1332-244F Red 24 30 8535 10 Internal 4 678-1332-244F Red 6 30 5473 6 Internal 5 678-2332-234F Green 6 30 14090 15 Internal 5 678-2332-224F Green 6 30 14090 15 Internal 5 678-2332-224F Green 6 30 14090 15 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 6	678-1212-332F	Green	12	30	2920	20	Protuding	1	.3158"
678-1112-341F Red 24 30 320 20 Protuding 1 678-1212-342F Green 24 30 2920 20 Protuding 1 678-1312-343F Green 24 30 490 20 Protuding 1 678-1312-343F Blue 24 30 220 20 Protuding 1 678-1312-344F Blue 24 30 2210 4 Internal 2 678-131-111F Red 2 30 2210 4 Internal 2 678-1331-113F Green 3.3 30 46860 4 Internal 2 678-1331-113F Green 3.3 30 46860 4 Internal 2 678-1331-113F Green 3.3 30 7100 4 Internal 2 678-1331-113F Green 3.3 30 3020 40 Internal 3 5.5 mm] 678-3331-113F Green 3.3 30 30600 20 Internal 3 678-3331-113F Green 3.3 30 4350 40 Internal 3 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-223F Green 6 30 41430 6 Internal 4 678-1332-223F Green 12 30 41430 6 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-231F Red 12 30 41430 6 Internal 4 678-132-234F Blue 6 30 5473 6 Internal 4 678-132-244F Blue 12 30 41430 6 Internal 4 678-132-244F Blue 12 30 41430 6 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 4 678-132-244F Blue 24 30 8535 10 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 4 678-132-244F Blue 24 30 8535 10 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 4 678-132-244F Blue 12 30 5473 6 Internal 5 Internal 5 678-2332-224F Green 6 30 16490 15 Internal 5 678-2332-244F Blue 6 30 5473 6 Internal	678-1312-333F	Orange	12	30	490	20	Protuding	1	(8.0 mm)
678-1212-342F Green 24 30 2920 20 Protuding 1 678-1312-343F Orange 24 30 490 20 Protuding 1 678-1412-344F Blue 24 30 220 20 Protuding 1 678-1412-344F Blue 24 30 2210 4 Internal 2 678-1331-111F Red 2 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 46860 4 Internal 2 678-1331-111F Green 3.3 30 2210 4 Internal 2 678-1331-111F Green 3.3 30 7100 4 Internal 2 678-1331-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Green 3.3 30 30600 20 Internal 3 678-3331-111F Green 3.3 30 3260 40 Internal 3 678-3331-12F Green 6 30 2210 5 Internal 4 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-222F Green 6 30 41430 6 Internal 4 678-1332-223F Green 6 30 41430 6 Internal 4 678-1332-223F Green 12 30 41430 6 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-232F Green 12 30 41430 6 Internal 4 678-1332-232F Green 12 30 41430 6 Internal 4 678-1332-233F Green 12 30 41430 6 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-1332-234F Red 24 30 2210 5 Internal 4 678-1332-234F Red 24 30 2210 5 Internal 4 678-1332-234F Red 24 30 41430 6 Internal 4 678-1332-244F Red 24 30 41430 6 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 5 Internal 5 678-2332-232F Green 6 30 12700 5 Internal 5 678-2332-234F Blue 6 30 2514 20 Internal 5 678-2332-234F Blue 6 30 5780 8 Internal 5 678-2332-234F Blue 6 30 5780 8 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Green 12 30 Internal 5 678-2332-24	678-1412-334F	Blue	12	30	220	20	Protuding	1	
678-1312-343F Orange 24 30 490 20 Protucing 1 678-1312-344F Blue 24 30 220 20 Protucing 1 678-1311-111F Red 2 30 2210 4 Internal 2 678-1231-112F Green 3.3 30 46860 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1331-113F Orange 2 30 30 2210 4 Internal 2 678-1331-113F Orange 2 30 30 2210 4 Internal 2 678-331-113F Green 3.3 30 7100 4 Internal 3 678-3331-111F Red 2 30 3020 40 Internal 3 678-3331-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3200 20 Internal 3 678-3331-113F Orange 2 30 3200 20 Internal 3 678-3331-113F Blue 3.3 30 4360 40 Internal 4 678-132-221F Red 6 30 2210 5 Internal 4 678-132-222F Green 6 30 41430 6 Internal 4 678-1432-224F Blue 6 30 8535 10 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-231F Red 12 30 41430 6 Internal 4 678-132-234F Blue 12 30 8535 10 Internal 4 678-132-241F Red 24 30 2210 5 Internal 4 678-132-242F Blue 6 30 5473 6 Internal 4 678-132-241F Red 24 30 2210 5 Internal 4 678-132-241F Red 24 30 2210 5 Internal 4 678-132-241F Red 30 5473 6 Internal 4 678-132-242F Blue 6 30 5473 6 Internal 4 678-132-244F Blue 12 30 8535 10 Internal 5 678-2332-224F Green 6 30 12700 5 Internal 5 678-2332-224F Blue 6 30 5780 8 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5	678-1112-341F	Red	24	30	320	20	Protuding	1	
678-1412-344F Blue 24 30 2210 4 Internal 2 678-1231-112F Green 3.3 30 46860 4 Internal 2 678-1231-112F Green 3.3 30 4210 4 Internal 2 678-1231-112F Green 3.3 30 426860 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1331-113F Orange 2 30 30 2210 4 Internal 2 678-1331-113F Orange 2 30 3020 40 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-1332-221F Red 6 30 2210 5 Internal 4 678-1323-2221F Green 6 30 8535 10 Internal 4 678-1323-2221F Green 6 30 8535 10 Internal 4 678-1323-233F Orange 6 30 8535 10 Internal 4 678-1323-233F Orange 12 30 8535 10 Internal 4 678-1323-234F Blue 12 30 2210 5 Internal 4 678-1323-234F Blue 12 30 8535 10 Internal 4 678-1323-243F Green 12 30 8535 10 Internal 4 678-1323-243F Green 24 30 8535 10 Internal 4 678-1323-243F Blue 12 30 5473 6 Internal 4 678-1323-243F Blue 12 30 8535 10 Internal 4 678-1323-243F Green 24 30 8535 10 Internal 4 678-1323-243F Green 24 30 8535 10 Internal 5 678-132-221F Red 6 30 12700 5 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2332-223F Green 12 30 16490 15 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-233F Blue 12 30 5780 8 Internal 5 678-2332-233F Blue 12 30 16490 15 Internal 5 678-2332-233F Blue 12 30 16490 15 Internal 5 678-2332-233F Blue 12 30 16490 15 Internal 5 678-2332-234F Blue 12	678-1212-342F	Green	24	30	2920	20	Protuding	1	
678-1131-111F Red 2 30 2210 4 Internal 2 678-1231-112F Green 3.3 30 48860 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1331-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3331-111F Red 2 30 3020 40 Internal 3 678-3331-111F Red 2 30 30600 20 Internal 3 678-3331-111F Red 3.3 30 30600 20 Internal 3 678-3331-111F Red 6 30 3240 40 Internal 3 678-3331-114F Blue 3.3 30 4360 20 Internal 3 678-3331-114F Red 6 30 2210 5 Internal 4 678-1322-221F Red 6 30 41430 6 Internal 4 678-1332-223F Green 6 30 41430 6 Internal 4 678-1332-231F Red 12 30 5473 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-1332-241F Red 24 30 41430 6 Internal 4 678-1322-241F Red 24 30 8535 10 Internal 5 678-2332-242F Green 6 30 12700 5 Internal 5 678-2332-221F Red 6 30 12700 5 Internal 5 678-2332-221F Red 6 30 12700 5 Internal 5 678-2332-221F Red 12 30 16490 15 Internal 5 678-2332-233F Orange 12 30 16490 15 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Blue 12	678-1312-343F	Orange	24	30	490	20	Protuding	1	
678-1231-112F Green 3.3 30 46860 4 Internal 2 678-1331-113F Orange 2 30 2210 4 Internal 2 678-1431-114F Blue 3.3 30 7100 4 Internal 2 678-1431-114F Blue 3.3 30 7100 4 Internal 3 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1332-221F Red 6 30 2210 5 Internal 4 678-1332-222F Green 6 30 41430 6 Internal 4 678-1332-222F Green 6 30 8535 10 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-1332-223F Green 12 30 41430 6 Internal 4 678-1332-233F Green 12 30 41430 6 Internal 4 678-1332-234F Red 12 30 2210 5 Internal 4 678-1332-232F Green 14 30 41430 6 Internal 4 678-1332-232F Green 15 30 41430 6 Internal 4 678-1332-222F Green 16 30 41430 6 Internal 4 678-1332-232F Green 17 30 41430 6 Internal 4 678-1332-232F Green 17 30 41430 6 Internal 4 678-1332-234F Blue 17 30 8535 10 Internal 4 678-1332-234F Red 24 30 41430 6 Internal 4 678-1332-234F Red 24 30 41430 6 Internal 4 678-1332-242F Green 24 30 41430 6 Internal 5 678-232-242F Green 6 30 16490 15 Internal 5 678-2332-223F Orange 6 30 12700 5 Internal 5 678-2332-223F Orange 6 30 2514 20 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5 678-2332-234F Red 12 30 2514 20 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30	678-1412-344F	Blue	24	30	220	20	Protuding	1	
678-1331-113F Orange 2 30 2210 4 Internal 2 268-1431-114F Blue 3.3 30 7100 4 Internal 2 2165" 678-3131-111F Red 2 30 3020 40 Internal 3 55 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-132-221F Red 6 30 2210 5 Internal 4 678-132-222F Green 6 30 41430 6 Internal 4 678-132-223F Orange 6 30 8535 10 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-231F Red 12 30 41430 6 Internal 4 678-132-231F Red 12 30 41430 6 Internal 4 678-132-231F Red 12 30 41430 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-231F Red 24 30 2210 5 Internal 4 678-1332-231F Red 24 30 8535 10 Internal 4 678-1322-241F Red 24 30 41430 6 Internal 4 678-1322-241F Red 6 30 12700 5 Internal 5 Internal 5 678-2132-221F Red 6 30 12700 5 Internal 5 Internal 5 678-2132-221F Red 6 30 12700 5 Internal 5 678-2132-221F Red 6 30 2514 20 Internal 5 678-2332-223F Green 12 30 16490 15 Internal 5 678-2332-231F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 12700 5 I	678-1131-111F	Red	2	30	2210	4	Internal	2	
678-1431-114F Blue 3.3 30 7100 4 Internal 2 2.165° 678-3131-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1132-221F Red 6 30 2210 5 Internal 4 678-1132-221F Red 6 30 41430 6 Internal 4 678-1332-222F Green 6 30 8535 10 Internal 4 678-1332-224F Blue 6 30 5473 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1322-232F Green 12 30 41430 6 Internal 4 678-1322-234F Blue 12 30 8535 10 Internal 4 678-1322-234F Blue 12 30 8535 10 Internal 4 678-1322-241F Red 24 30 41430 6 Internal 4 678-1322-241F Red 24 30 2210 5 Internal 4 678-1322-241F Red 24 30 2210 5 Internal 4 678-1322-241F Red 24 30 41430 6 Internal 4 678-1322-242F Green 24 30 41430 6 Internal 4 678-1322-241F Red 24 30 8535 10 Internal 4 678-1322-241F Red 24 30 8535 10 Internal 4 678-1322-241F Red 6 30 12700 5 Internal 5 678-232-222F Green 6 30 16490 15 Internal 5 678-2322-222F Green 6 30 16490 15 Internal 5 678-2322-231F Red 12 30 12700 5 Internal 5 678-2332-231F Red 12 30 12700 5 Internal 5 678-2332-231F Red 12 30 12700 5 Internal 5 678-2332-231F Red 12 30 16490 15 Internal 5 678-2332-231F Red 12 30 12700 5 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5 678-2332-234F Green 12 3	678-1231-112F	Green	3.3	30	46860	4	Internal	2	
678-3131-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1132-221F Red 6 30 2210 5 Internal 4 678-1232-222F Green 6 30 41430 6 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-232F Green 12 30 41430 6 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-234F Blue 12 30 41430 6 Internal 4 678-1332-234F Red 24 30 41430 6 Internal 4 678-1332-241F Red 24 30 8535 10 Internal 4 678-1332-241F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2332-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2332-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2332-231F Red 12 30 12700 5 Internal 5 (678-2332-231F Red 12 30 12700 5 Internal 5 (678-2332-234F Red 12 30 12700 5 Internal 5 (6	678-1331-113F	Orange	2	30	2210	4	Internal	2	
678-3131-111F Red 2 30 3020 40 Internal 3 5.5 mm) 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3231-112F Green 3.3 30 30600 20 Internal 3 678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-132-221F Red 6 30 2210 5 Internal 4 678-132-222F Green 6 30 41430 6 Internal 4 678-132-222F Green 6 30 8535 10 Internal 4 678-132-223F Blue 6 30 5473 6 Internal 4 678-132-231F Red 12 30 2210 5 Internal 4 678-132-232F Green 12 30 41430 6 Internal 4 678-132-232F Green 12 30 41430 6 Internal 4 678-132-232F Green 12 30 41430 6 Internal 4 678-132-234F Blue 12 30 5473 6 Internal 4 678-132-241F Red 24 30 2210 5 Internal 4 678-132-241F Red 24 30 41430 6 Internal 4 678-132-241F Red 24 30 41430 6 Internal 4 678-132-241F Red 24 30 8535 10 Internal 4 678-132-241F Red 6 30 12700 5 Internal 4 678-132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2332-223F Orange 6 30 5780 8 Internal 5 678-2432-224F Blue 6 30 2514 20 Internal 5 678-2432-224F Red 12 30 12700 5 Internal 5 678-2432-234F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-2	678-1431-114F	Blue	3.3	30	7100	4	Internal	2	.2165"
678-3331-113F Orange 2 30 3260 20 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1132-221F Red 6 30 2210 5 Internal 4 678-1232-222F Green 6 30 41430 6 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-1432-224F Blue 6 30 5473 6 Internal 4 678-1322-237F Red 12 30 2210 5 Internal 4 678-1322-237F Green 12 30 41430 6 Internal 4 678-1322-237F Green 12 30 41430 6 Internal 4 678-1322-237F Blue 12 30 8535 10 Internal 4 678-1322-237F Red 24 30 8535 10 Internal 4 678-1322-247F Red 24 30 2210 5 Internal 4 678-1322-247F Green 24 30 41430 6 Internal 4 678-1323-242F Green 24 30 41430 6 Internal 4 678-1323-242F Green 24 30 8535 10 Internal 4 678-1323-247F Blue 24 30 8535 10 Internal 4 678-1323-247F Blue 24 30 8535 10 Internal 4 678-1323-247F Blue 24 30 8535 10 Internal 5 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 (5.0 mm) 678-2232-223F Green 12 30 12700 5 Internal 5 (5.0 mm) 678-2332-233F Red 12 30 12700 5 Internal 5 (5.0 mm) 678-2332-233F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-233F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-233F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-233F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Blue 6 30 2514 20 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234F Red 12 30 12700 5 Internal 5 (5.2 mm) 678-2332-234	678-3131-111F	Red	2	30	3020	40	Internal	3	
678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1132-221F Red 6 30 2210 5 Internal 4 678-1232-222F Green 6 30 41430 6 Internal 4 678-1232-222F Green 6 30 8535 10 Internal 4 678-1332-223F Orange 6 30 5473 6 Internal 4 678-1322-231F Red 12 30 2210 5 Internal 4 678-1322-231F Red 12 30 41430 6 Internal 4 678-1322-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-1332-234F Red 24 30 2210 5 Internal 4 678-1332-241F Red 24 30 2210 5 Internal 4 678-1322-242F Green 24 30 41430 6 Internal 4 678-1322-242F Green 24 30 8535 10 Internal 4 678-1322-242F Red 6 30 5473 6 Internal 4 678-1322-242F Green 6 30 16490 5 Internal 5 Internal 5 678-2322-222F Green 6 30 16490 15 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-234F Blue 6 30 2514 20 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5	678-3231-112F	Green	3.3	30	30600	20	Internal	3	
678-3431-114F Blue 3.3 30 4360 40 Internal 3 678-1132-221F Red 6 30 2210 5 Internal 4 678-1232-222F Green 6 30 41430 6 Internal 4 678-1232-222F Green 6 30 8535 10 Internal 4 678-1332-224F Blue 6 30 5473 6 Internal 4 678-1332-231F Red 12 30 2210 5 Internal 4 678-1332-231F Red 12 30 41430 6 Internal 4 678-1332-232F Green 12 30 41430 6 Internal 4 678-1332-234F Blue 12 30 8535 10 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-1332-241F Red 24 30 2210 5 Internal 4 678-1332-241F Red 24 30 2210 5 Internal 4 678-1332-242F Green 24 30 41430 6 Internal 4 678-1332-242F Green 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 8535 10 Internal 4 678-1332-244F Red 6 30 8535 10 Internal 5 678-1332-224F Red 6 30 12700 5 Internal 5 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2332-223F Orange 6 30 5780 8 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5 678-2332-234F Blue 6 30 2514 20 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 12700 5 Internal 5	678-3331-113F	Orange	2	30	3260	20	Internal	3	
678-1232-222F Green 6 30 41430 6 Internal 4 678-1332-223F Orange 6 30 8535 10 Internal 4 678-1432-224F Blue 6 30 5473 6 Internal 4 678-1132-231F Red 12 30 2210 5 Internal 4 678-1232-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1332-233F Blue 12 30 8535 10 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-132-241F Red 24 30 2210 5 Internal 4 678-1322-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-243F Blue 24 30 8535 10 Internal 4 678-1332-242F Green 6 30 8535 10 Internal 4 678-1332-243F Blue 24 30 8535 10 Internal 5 678-2332-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-233F Orange 12 30 5780 8 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 5780 8 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 16490 15 Internal 5 678-2332-234F Red 12 30 5780 8 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-2332-234F Red 12 30 5780 8 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5	678-3431-114F	_	3.3	30	4360	40	Internal	3	
678-1332-223F Orange 6 30 8535 10 Internal 4 678-1432-224F Blue 6 30 5473 6 Internal 4 678-1132-231F Red 12 30 2210 5 Internal 4 678-1232-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1332-234F Blue 12 30 5473 6 Internal 4 678-1332-241F Red 24 30 2210 5 Internal 4 678-1132-241F Red 24 30 41430 6 Internal 4 678-1332-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 5 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-233F Orange 6 30 2514 20 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-232F Green 12 30 16490 15 Internal 5 678-2332-232F Green 12 30 16490 15 Internal 5 678-2332-233F Orange 12 30 5780 8 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Red 12 30 2514 20 Internal 5 678-2432-234F Red 12 30 2514 20 Internal 5 678-2432-234F Red 12 30 2514 20 Internal 5 678-2332-234F Green 12 30 16490 15 Internal 5 678-2332-244F Red 12 30 2514 20 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 16490 15 Internal 5	678-1132-221F	Red	6	30	2210	5	Internal	4	
678-1432-224F Blue 6 30 5473 6 Internal 4 678-1132-231F Red 12 30 2210 5 Internal 4 678-1232-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 8535 10 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-233F Orange 12 30 5780 8 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 6 30 2514 20 Internal 5 678-2332-237F Green 12 30 16490 15 Internal 5 678-2332-237F Red 12 30 2514 20 Internal 5 678-2332-237F Red 12 30 12700 5 Internal 5 678-2332-237F Green 12 30 16490 15 Internal 5 678-2332-247F Red 12 30 2514 20 Internal 5 678-2332-247F Red 12 30 12700 5 Internal 5 678-2332-247F Green 12 30 16490 15 Internal 5 678-2332-247F Green 12 30 16490 15 Internal 5 678-2332-247F Green 12 30 16490 15 Internal 5	678-1232-222F	Green	6	30	41430	6	Internal	4	
678-1432-224F Blue 6 30 5473 6 Internal 4 678-1132-231F Red 12 30 2210 5 Internal 4 678-1232-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-241F Red 6 30 8535 10 Internal 4 678-1332-241F Red 6 30 12700 5 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2332-233F Orange 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 2514 20 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5	678-1332-223F	Orange	6	30	8535	10	Internal	4	
678-1232-232F Green 12 30 41430 6 Internal 4 678-1332-233F Orange 12 30 8535 10 Internal 4 678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 8535 10 Internal 4 678-1432-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-224F Blue 6 30 2514 20 Internal 5 678-2332-232F Green 12 30 16490 15 Internal 5 678-2332-232F Green 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 5780 8 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1432-224F	_	6	30	5473	6	Internal	4	
678-1332-233F Orange 12 30 8535 10 Internal 4 678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-1432-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-223F Orange 6 30 5780 8 Internal 5 678-2432-224F Blue 6 30 12700 5 Internal 5 678-2332-232F Green 12 30 12700 5 Internal 5 678-2332-232F Green 12 30 12700 5 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2332-233F Green 12 30 16490 15 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 16490 15 Internal 5 678-2432-234F Red 12 30 12700 5 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1132-231F	Red	12	30	2210	5	Internal	4	
678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2432-224F Blue 6 30 2514 20 Internal 5 678-2322-232F Green 12 30 12700 5 Internal 5 678-2322-232F Green 12 30 16490 15 Internal 5 678-2332-233F Orange 12 30 12700 5 Internal 5 678-2332-233F Orange 12 30 16490 15 Internal 5 678-2322-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-241F Red 12 30 12700 5 Internal 5 678-2332-241F Red 12 30 12700 5 Internal 5 678-2332-241F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1232-232F	Green	12	30	41430	6	Internal	4	
678-1432-234F Blue 12 30 5473 6 Internal 4 678-1132-241F Red 24 30 2210 5 Internal 4 678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 678-2332-222F Green 6 30 16490 15 Internal 5 678-2432-224F Blue 6 30 2514 20 Internal 5 678-2322-232F Green 12 30 12700 5 Internal 5 678-2322-232F Green 12 30 16490 15 Internal 5 678-2332-233F Orange 12 30 12700 5 Internal 5 678-2332-233F Orange 12 30 16490 15 Internal 5 678-2322-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-241F Red 12 30 12700 5 Internal 5 678-2332-241F Red 12 30 12700 5 Internal 5 678-2332-241F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1332-233F	Orange	12	30	8535	10	Internal	4	
678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-223F Orange 6 30 2514 20 Internal 5 678-2132-231F Red 12 30 12700 5 Internal 5 678-2232-232F Green 12 30 16490 15 Internal 5 678-232-232F Green 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-232-234F Blue 12 30 2514 20 Internal 5 678-2432-244F Red 12 30 12700 5 Internal 5 678-232-244F Red 12 30 12700 5 Internal 5 678-232-244F Red 12 30 12700 5 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1432-234F	_		30	5473		Internal	4	
678-1232-242F Green 24 30 41430 6 Internal 4 678-1332-243F Orange 24 30 8535 10 Internal 4 678-1332-244F Blue 24 30 5473 6 Internal 4 678-2132-221F Red 6 30 12700 5 Internal 5 678-2232-222F Green 6 30 16490 15 Internal 5 678-2332-223F Orange 6 30 2514 20 Internal 5 678-2132-231F Red 12 30 12700 5 Internal 5 678-2232-232F Green 12 30 16490 15 Internal 5 678-232-232F Green 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 12700 5 Internal 5 678-2332-234F Blue 12 30 16490 15 Internal 5 678-2332-234F Blue 12 30 2514 20 Internal 5 678-2432-234F Blue 12 30 5780 8 Internal 5 678-2432-234F Blue 12 30 16490 15 Internal 5 678-2132-241F Red 12 30 12700 5 Internal 5 678-2132-241F Red 12 30 12700 5 Internal 5 678-2232-242F Green 12 30 16490 15 Internal 5 678-2332-244F Red 12 30 12700 5 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5 678-2332-244F Green 12 30 16490 15 Internal 5	678-1132-241F	Red	24	30	2210	5	Internal	4	
678-1432-244F Blue 24 30 5473 6 Internal 4 0.197" (5.0 mm) 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 (5.0 mm) 678-2332-223F Orange 6 30 5780 8 Internal 5 (5.0 mm) 678-2432-224F Blue 6 30 2514 20 Internal 5 (678-2132-231F Red 12 30 12700 5 Internal 5 (678-2232-232F Green 12 30 16490 15 Internal 5 (678-2332-233F Orange 12 30 5780 8 Internal 5 (678-2432-234F Blue 12 30 2514 20 Internal 5 (678-2432-234F Blue 12 30 2514 20 Internal 5 (678-2432-234F Blue 12 30 2514 20 Internal 5 (678-2432-234F Blue 12 30 12700 5 Internal 5 (678-2132-241F Red 12 30 12700 5 Internal 5 (678-2232-242F Green 12 30 16490 15 Internal 5 (678-2332-243F Orange 12 30 5780 8 Internal	678-1232-242F	Green	24	30		6	Internal	4	
678-1432-244F Blue 24 30 5473 6 Internal 4 0.197" (5.0 mm) 678-2132-221F Red 6 30 12700 5 Internal 5 (5.0 mm) 678-2232-222F Green 6 30 16490 15 Internal 5 (5.0 mm) 678-2332-223F Orange 6 30 5780 8 Internal 5 (5.0 mm) 678-2432-224F Blue 6 30 2514 20 Internal 5 (5.0 mm) 678-2132-231F Red 12 30 12700 5 Internal 5 (5.0 mm) 678-2232-232F Green 12 30 16490 15 Internal 5 (5.0 mm) 678-2332-233F Orange 12 30 5780 8 Internal 5 (5.0 mm) 678-2432-234F Blue 12 30 2514 20 Internal 5 (5.0 mm) 678-2432-234F Blue 12 30 2514 20 Internal 5 (5.0 mm) 678-2432-234F Red 12 30 12700 5 Internal 5 (5.0 mm) 678-2232-241F Red 12 30 12700 5 Internal 5 (5.0 mm) 678-2232-242F Green 12 30 16490 15 Internal 5 (5.0 mm)	678-1332-243F	Orange	24	30	8535	10	Internal	4	
678-2232-222F       Green       6       30       16490       15       Internal       5         678-2332-223F       Orange       6       30       5780       8       Internal       5         678-2432-224F       Blue       6       30       2514       20       Internal       5         678-2132-231F       Red       12       30       12700       5       Internal       5         678-2232-232F       Green       12       30       16490       15       Internal       5         678-2332-233F       Orange       12       30       5780       8       Internal       5         678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5		_	24			6		4	0.197"
678-2332-223F         Orange         6         30         5780         8         Internal         5           678-2432-224F         Blue         6         30         2514         20         Internal         5           678-2132-231F         Red         12         30         12700         5         Internal         5           678-2332-232F         Green         12         30         16490         15         Internal         5           678-2332-233F         Orange         12         30         5780         8         Internal         5           678-2432-234F         Blue         12         30         2514         20         Internal         5           678-2132-241F         Red         12         30         12700         5         Internal         5           678-2232-242F         Green         12         30         16490         15         Internal         5           678-2332-243F         Orange         12         30         5780         8         Internal         5	678-2132-221F	Red	6	30		5	Internal	5	(5.0 mm)
678-2432-224F       Blue       6       30       2514       20       Internal       5         678-2132-231F       Red       12       30       12700       5       Internal       5         678-2232-232F       Green       12       30       16490       15       Internal       5         678-2332-233F       Orange       12       30       5780       8       Internal       5         678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5			6			15			
678-2132-231F       Red       12       30       12700       5       Internal       5         678-2232-232F       Green       12       30       16490       15       Internal       5         678-2332-233F       Orange       12       30       5780       8       Internal       5         678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5	678-2332-223F	Orange	6	30		8	Internal	5	
678-2232-232F       Green       12       30       16490       15       Internal       5         678-2332-233F       Orange       12       30       5780       8       Internal       5         678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5		Blue	6	30		20	Internal	5	
678-2332-233F       Orange       12       30       5780       8       Internal       5         678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5	678-2132-231F	Red	12	30		5	Internal	5	
678-2432-234F       Blue       12       30       2514       20       Internal       5         678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5		Green					Internal	5	
678-2132-241F       Red       12       30       12700       5       Internal       5         678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5	678-2332-233F	_		30			Internal	5	
678-2232-242F       Green       12       30       16490       15       Internal       5         678-2332-243F       Orange       12       30       5780       8       Internal       5		Blue	12	30		20	Internal	5	
678-2332-243F Orange 12 30 5780 8 Internal 5	678-2132-241F	Red		30		5	Internal	5	
	678-2232-242F	Green				15	Internal	5	
678-2432-244F Blue 12 30 2514 20 Internal 5		Orange		30		8	Internal	5	
	678-2432-244F	Blue	12	30	2514	20	Internal	5	

<sup>\*</sup> For wire leads: replace 7th digit with "5" for example 678-1115-321F

### 9mm Panel Mount Indicator



N	Mechanical information					
Mounting Hole Size: 0.374" (9.5mm)						
Max Panel Thickness:	0.378" (9.50mm); w/Gasket: 0.318" (8.0mm)					
Mounting Torque:	0.362 lbs/ft (5ka/cm) torque					

#### **Application:**

The 679 Series LED Panel Mount Indicators are designed for a variety of applications such as:

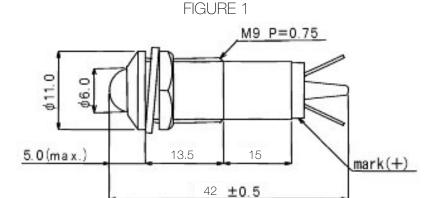
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation
- ...and many more!

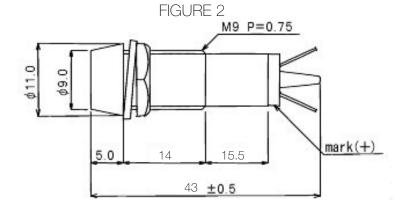
#### **Certifications & Ratings**

- RoHS compliant
- NEMA 4X
- IP66 (water tight)

Specifications Specification Specifi						
Operating Voltage:	6, 12 & 24 V DC (no resistor required)	Housing:	Chrome or Black plated brass			
Operating Temp:	-20°C to +75°C (-4°F to 167°F)	Terminal:	Copper-Nickel Plated			
Storage Temp:	-40°C to +100°C (-40°F to 212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Solder terminals, 6" wire leads	Nut:	Brass-Nickel Plated			

#### **Dimensions**





Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	Led Position	Plating Finish	Fig
679-2112-321F	Red	6	30	775	Recessed	Chrome	1
679-2212-322F	Green	6	30	5870	Recessed	Chrome	1
679-2312-323F	Yellow	6	30	1570	Recessed	Chrome	1
679-2412-324F	Blue	6	30	270	Recessed	Chrome	1
679-2112-331F	Red	12	30	775	Recessed	Chrome	1
679-2212-332F	Green	12	30	5870	Recessed	Chrome	1
679-2312-333F	Yellow	12	30	1570	Recessed	Chrome	1
679-2412-334F	Blue	12	30	270	Recessed	Chrome	1
679-2112-341F	Red	24	30	775	Recessed	Chrome	1
679-2212-342F	Green	24	30	5870	Recessed	Chrome	1
679-2312-343F	Yellow	24	30	1570	Recessed	Chrome	1
679-2412-344F	Blue	24	30	270	Recessed	Chrome	1
679-2122-321F	Red	6	30	775	Recessed	Black	1
679-2222-322F	Green	6	30	5870	Recessed	Black	1
679-2322-323F	Yellow	6	30	1570	Recessed	Black	1
679-2422-324F	Blue	6	30	270	Recessed	Black	1
679-2122-331F	Red	12	30	775	Recessed	Black	1
679-2222-332F	Green	12	30	5870	Recessed	Black	1
679-2322-333F	Yellow	12	30	1570	Recessed	Black	1
679-2422-334F	Blue	12	30	270	Recessed	Black	1
679-2122-341F	Red	24	30	775	Recessed	Black	1
679-2222-342F	Green	24	30	5870	Recessed	Black	1
679-2322-343F	Yellow	24	30	1570	Recessed	Black	1
679-2422-344F	Blue	24	30	270	Recessed	Black	1
679-1112-321F	Red	6	30	485	Protruding	Chrome	2
679-1212-322F	Green	6	30	5870	Protruding	Chrome	2
679-1312-323F	Yellow	6	30	1570	Protruding	Chrome	2
679-1412-324F	Blue	6	30	215	Protruding	Chrome	2
679-1112-331F	Red	12	30	485	Protruding	Chrome	2
679-1212-332F	Green	12	30	5870	Protruding	Chrome	2
679-1312-333F	Yellow	12	30	1570	Protruding	Chrome	2
679-1412-334F	Blue	12	30	215	Protruding	Chrome	2
679-1112-341F	Red	24	30	485	Protruding	Chrome	2
679-1212-342F	Green	24	30	5870	Protruding	Chrome	2
679-1312-343F	Yellow	24	30	1570	Protruding	Chrome	2
679-1412-344F	Blue	24	30	215	Protruding	Chrome	2
679-1122-321F	Red	6	30	485	Protruding	Black	2
679-1222-322F	Green	6	30	5870	Protruding	Black	2
679-1322-323F	Yellow	6	30	1570	Protruding	Black	2
679-1422-324F	Blue	6	30	215	Protruding	Black	2
679-1122-331F	Red	12	30	485	Protruding	Black	2
679-1222-332F	Green	12	30	5870	Protruding	Black	2
679-1322-333F	Yellow	12	30	1570	Protruding	Black	2
679-1422-334F	Blue	12	30	215	Protruding	Black	2
679-1122-341F	Red	24	30	485	Protruding	Black	2
679-1222-342F	Green	24	30	5870	Protruding	Black	2
679-1322-343F	Yellow	24	30	1570	Protruding	Black	2
				10/0	T TO TI GOTT TO	DIGON	

<sup>\*</sup> For wire leads: replace 7th digit with "5" for example 679-2115-321F 

### 10mm Panel Mount Indicator



Mechanical information					
Mounting Hole Size: see below (Fig. 1)					
0.406" (10.3mm) (Fig. 2)					
Max Panel Thickness:	0.236" (6.0mm)				
Mounting Torque: 0.217 lbs/ft (5 kg/cm) - Figure 1 only					

#### **Application:**

The 680 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

...and many more!

#### **Certifications & Ratings**

• RoHS compliant

Specifications Specification Specif						
Operating Voltage:	6, 12 & 24 V DC (no resistor required)	Housing:	Polycarbonate			
Operating Temp:	-20°C to +75°C (-4°F to +167°F)	Terminal:	Copper-Nickel Plated			
Electrical Connection:	Solder terminals, 6" wire leads	Lock Washer:	Iron-Nickel Plated			
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Nut:	Brass-Nickel Plated			

#### **Dimensions**

Figure 1

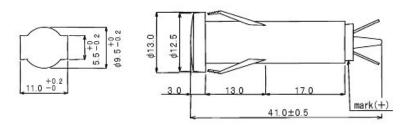
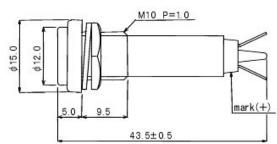


Figure 2



### **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Intensity Typ. (mcd)	Led Position	Figure	Panel Thickness
680-3132-221F	Red	6	30	335	Internal	1	
680-3232-222F	Green	6	30	4070	Internal	1	
680-3332-223F	Yellow	6	30	1025	Internal	1	
680-3432-224F	Blue	6	30	730	Internal	1	
680-3132-231F	Red	12	30	335	Internal	1	
680-3232-232F	Green	12	30	4070	Internal	1	0.098"
680-3332-223F	Yellow	12	30	1025	Internal	1	(2.5mm)
680-3432-234F	Blue	12	30	730	Internal	1	
680-3132-241F	Red	24	30	335	Internal	1	
680-3232-242F	Green	24	30	4070	Internal	1	
680-3332-243F	Yellow	24	30	1025	Internal	1	
680-3432-244F	Blue	24	30	730	Internal	1	
680-3132-121F	Red	6	30	1530	Internal	2	
680-3232-122F	Green	6	30	4330	Internal	2	
680-3332-123F	Yellow	6	30	1455	Internal	2	
680-3432-124F	Blue	6	30	245	Internal	2	
680-3132-131F	Red	12	30	1530	Internal	2	
680-3232-132F	Green	12	30	4330	Internal	2	0.236"
680-3332-133F	Yellow	12	30	1455	Internal	2	(6.0mm)
680-3432-134F	Blue	12	30	245	Internal	2	
680-3132-141F	Red	24	30	1530	Internal	2	
680-3232-142F	Green	24	30	4330	Internal	2	
680-3332-143F	Yellow	24	30	1455	Internal	2	
680-3432-144F	Blue	24	30	245	Internal	2	

<sup>\*</sup> For wire leads: replace 7th digit with "5" for example 680-313**5**-221F

### 12mm Panel Mount Indicator



N	Mechanical information					
Mounting Hole Size: 0.492" (12.5mm)						
Max Panel Thickness:	0.236" (6.3mm)					
Mounting Torque: 0.217 lbs/ft (3 kg/cm)						

#### Application:

The 682 Series LED Panel Mount Indicators are designed for a variety of applications such as:

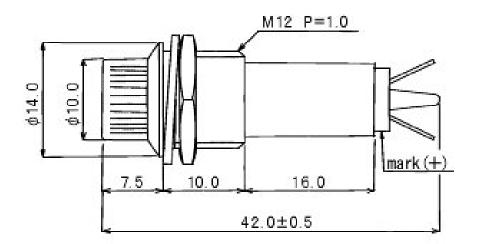
- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation
- ...and many more!

#### **Certifications & Ratings**

• RoHS compliant

Specifications Specification Specificatio					
Operating Voltage:	6,12 & 24V DC (no resistor required)	Housing:	Polycarbonate		
Operating Temp:	-20°C to +75°C (-4°F to +167°F)	Terminal:	Copper-Nickel Plated		
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	Iron-Nickel Plated		
Electrical Connection:	Solder terminals and 6" wire leads	Nut:	Brass-Nickel Plated		

#### **Dimensions**



Dimension are in Inches [mm]

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)
682-3132-121F	Red	6	20	510
682-3232-122F	Green	6	20	2225
682-3332-123F	Orange	6	20	510
682-3432-124F	Blue	6	20	260
682-3132-131F	Red	12	20	510
682-3232-132F	Green	12	20	2225
682-3332-133F	Orange	12	20	510
682-3432-134F	Blue	12	20	260
682-3132-141F	Red	24	20	510
682-3232-142F	Green	24	20	2225
682-3332-143F	Orange	24	20	510
682-3432-144F	Blue	24	20	260

<sup>\*</sup> For wire leads: replace 7th digit with "5" for example 682-313<u>5</u>-121F

### **16mm Panel Mount Indicator**



Mechanical information					
Mounting Hole Size: 0.650" (16.5mm)					
Max Panel Thickness:	0.236" (6.3mm)				
Mounting Torque:	0.217 lbs/ft (3kg/cm)				

#### Application:

The 686 Series LED Panel Mount Indicators are designed for a variety of applications such as:

- Main power indication
- Remote power indication
- Status indication
- Maintenance and warning indication
- Instrumentation

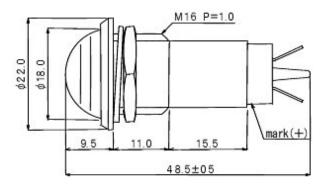
...and many more!

#### **Certifications & Ratings**

• RoHS compliant

Specifications Specification Specifi						
Operating Voltage:	6,12 & 24V DC (no resistor required)	Housing:	Polycarbonate			
Operating Temp:	-20°C to +75°C (-4°F to +167°F)	Terminal:	Copper-Nickel Plated			
Storage Temp:	-40°C to +100°C (-40°F to +212°F)	Lock Washer:	Iron-Nickel Plated			
Electrical Connection:	Solder terminals	Nut:	Brass-Nickel Plated			

#### **Dimensions**



Dimension are in Inches [mm]

# **Ordering Information**

Part Number	Color	Voltage (V DC)	Current (mA)	Typical Intensity (mcd)
686-1132-121F	Red	6	20	660
686-1232-122F	Green	6	20	8150
686-1332-123F	Orange	6	20	500
686-1432-124F	Blue	6	20	240
686-1132-131F	Red	12	20	660
686-1232-132F	Green	12	20	8150
686-1332-133F	Orange	12	20	500
686-1432-134F	Blue	12	20	240
686-1132-141F	Red	24	20	660
686-1232-142F	Green	24	20	8150
686-1332-143F	Orange	24	20	500
686-1432-144F	Blue	24	20	240

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### **LED Based Bulbs**

### **Quick Reference**



#### **Application:**

With the technological advancements in Light Emitting Diodes (LEDs) brightness can now rival the incandescent lamp when used in similar packages. These advancements have allowed for a new type of product called the Based LED - an LED with the fit and functionality of an incandescent light bulb

- High reliability vibration and shock resistant
- Multi-chip, Cluster, and Single Ultra-Bright Chip
- AllnGaP and InGaN die technology
- · Polarized and non-polarized
- Single and multi-voltage input ...and many more!

#### **Certifications & Ratings**

• RoHS compliant

#### **Considerations:**

- Since lens caps act as filters for the light emitted from the based LED, it is important to match the emitting color of the LED. If not matched properly, the overall light output may be substantially reduced. Dialight recommends using transparent lenses, which will optimize the light output.
- Although these lamps can be operated at a lower voltage, which will increase the life, the intensity will be reduced.
- Operation of the based LED at a higher voltage should not exceed 10% above the recommended voltage.
- Dialight does not recommend that based LED lamps be used in neon sockets.

Base Style	Configuration	Color	6 V DC	12 - 24 V DC	24 - 48 V DC	120 V AC	Polarized	6-36 V DC	ROHS Compliant
T1 3/4 Midget Flange	Single Chip	Red / Green / Yellow / Blue / White	•	•	•		Polarized		•
T1 3/4 Midget Flange	Multi Chip	Red / Green / Yellow	•	•	•		Polarized / Non-Polarized		
T1 3/4 Wedge (T5)	Single / Dual Chip	Red / Green / Yellow / Blue / White	•	•	•		Non-Polarized		•
T1 3/4 Wedge (T5)	Multi Chip	Red / Green / Yellow	•	•	•		Polarized / Non-Polarized		
T1 3/4 Bi-Pin	Single Chip	Red / Green / Yellow / Blue / White	•	•	•		Polarized		•
T1 3/4 Bi-Pin	Multi Chip	Red / Green / Yellow	•	•	•		Polarized / Non-Polarized		
T2 Telephone Slide	Single Chip	Red / Green / Yellow / Blue / White			•		Non-Polarized		•
T3 1/4 Miniature Bayonet (BA9s)	Single Chip	Red / Green / Yellow / Blue / White	•	•	•		Polarized / Non-Polarized	•	•
T3 1/4 Miniature Bayonet (BA9s)	Cluster	Red / Green / Yellow / Blue / White	•	•	•	•	Polarized / Non-Polarized		•
T3 1/4 Miniature Screw (E10)	Single Chip	Red / Green / Yellow / Blue / White	•	•	•		Non-Polarized	•	•
T3 1/4 Wedge (T10)	Cluster	Red / Green / Yellow / Blue / White	•	•	•		Non-Polarized		•
15mm Bayonet (BA15s)	Custer	Red / Green / Yellow / Blue / White		•	•		Polarized		•

### Single Chip Based LED - T1 3/4 Midget Flange

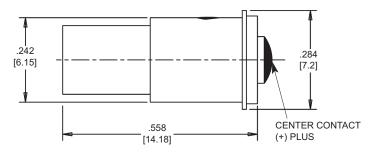


#### Features/Benefits:

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- AllnGaP and InGaN die technology
- Super bright single chip design
- No heat generated

Specifications					
Base:	T1 3/4 Midget Flange				
Voltage Options:	6,14, and 28 V DC				
Operating Temp:	-40°C to +80°C (-40°F to +176°F)				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)				

#### **Dimensions**



Measurements are typical Dimension are in Inches [mm]

Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
586-1101-101F	Red	639	6	10	775
586-1102-101F	Green	520	6	10	600
586-1103-101F	Yellow	592	6	10	775
586-1105-101F	Blue	467	6	10	210
586-1106-101F	White	*	6	10	460
586-1101-103F	Red	639	14	10	775
586-1102-103F	Green	520	14	10	600
586-1103-103F	Yellow	592	14	10	775
586-1105-103F	Blue	467	14	10	210
586-1106-103F	White	*	14	10	460
586-1101-105F	Red	639	28	10	775
586-1102-105F	Green	520	28	10	600
586-1103-105F	Yellow	592	28	10	775
586-1105-105F	Blue	467	28	10	210
586-1106-105F	White	*	28	10	460

<sup>\*</sup> Color coordinates: x=0.320, y=0.320

### Multi-Chip Based LED - T1 3/4 Midget Flange

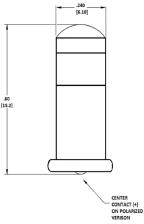


#### **RoHS Compliant Features/Benefits**

- Longer life
- Energy savings 90% less power required
- Mounts directly into industry standard socket
- Polarized and non-polarized

Specifications						
Base:	T1 3/4 Midget Flange					
Voltage Options:	6,14, and 28 V DC					
Operating Temp:	-20°C to +60°C (-4°F to +140°F)					
Storage Temp:	-30°C to +100°C (-22°F to +212°F)					

#### **Dimensions**



	VERISON								
Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)				
	Polarized LED Bulbs								
585-1211	Red	660	6	50	67				
585-1311	Green	565	6	46	77				
585-1411	Yellow	585	6	44	22				
585-1213	Red	660	14	30	60				
585-1313	Green	565	14	28	70				
585-1413	Yellow	585	14	30	23				
585-1215	Red	660	28	16	64				
585-1315	Green	565	28	15	75				
585-1415	Yellow	585	28	15	23				
		Non-Po	larized LED Bulbs						
585-1221	Red	660	6	75	50				
585-1321	Green	565	6	67	56				
585-1421	Yellow	585	6	73	18				
585-1223	Red	660	14	26	50				
585-1323	Green	565	14	23	56				
585-1423	Yellow	585	14	24	18				
585-1225	Red	660	28	14	56				
585-1325	Green	565	28	13	65				
585-1425	Yellow	585	28	13	20				

### Single Chip Based LED - T1 3/4 Wedge (T5)

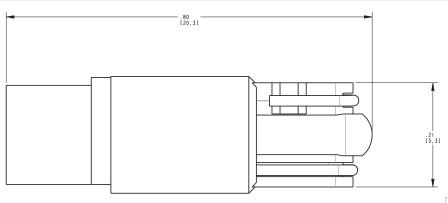


#### Features/Benefits

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- Wide 100 degree viewing angel
- No heat generated

Specifications					
Base:	T1 3/4 Midget Flange				
Voltage Options:	6,14, and 28 V DC				
Operating Temp:	-40°C to +80°C (-40°F to +176°F)				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ.(mA)	Intensity Typ. (mcd)
586-1A01-101F	Red	630	6	16	775
586-1A02-101F	Green	526	6	16	600
586-1A03-101F	Yellow	592	6	16	775
586-1A05-101F	Blue	472	6	16	165
586-1A06-101F	White	*	6	16	460
586-1A01-103F	Red	630	14	16	775
586-1A02-103F	Green	526	14	16	600
586-1A03-103F	Yellow	592	14	16	775
586-1A05-103F	Blue	472	14	16	165
586-1A06-103F	White	*	14	16	460
586-1A01-105F	Red	630	28	16	775
586-1A02-105F	Green	526	28	16	600
586-1A03-105F	Yellow	592	28	16	775
586-1A05-105F	Blue	472	28	16	165
586-1A06-105F	White	*	28	16	460

<sup>\*</sup> Color coordinates: x=0.320, y=0.320

### Based LED - T1 3/4 Wedge (T5)

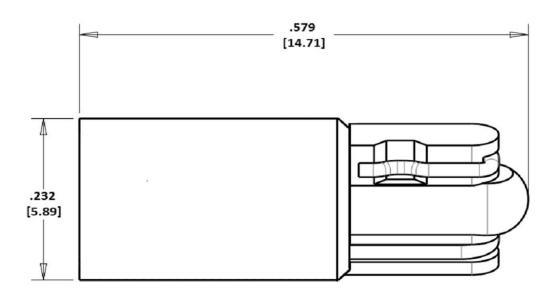


#### Features/Benefits

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Unique multi-LED design provides superior illumination
- AllnGaP and InGaN die technology
- True Non-Polarized design
- Mounts directly into industry standard socket

Specifications					
Base:	T1 3/4 Wedge				
Voltage Options:	6, 12, 14 and 28 V DC				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
586-1201-201F	Red	615	6	35	450
586-1202-201F	Green	528	6	12	120
586-1203-201F	Yellow	587	6	35	450
586-1205-201F	Blue	470	6	12	50
586-1206-201F	White	*	6	15	320
586-1201-202F	Red	615	12	18	450
586-1202-202F	Green	528	12	8	170
586-1203-202F	Yellow	587	12	18	450
586-1205-202F	Blue	470	12	8	70
586-1206-202F	White	*	12	11	450
586-1201-203F	Red	615	14	20	500
586-1202-203F	Green	528	14	8.5	185
586-1203-203F	Yellow	587	14	20	500
586-1205-203F	Blue	470	14	8.5	75
586-1206-203F	White	*	14	12	500
586-1201-204F	Red	615	24	14	350
586-1202-204F	Green	528	24	10	215
586-1203-204F	Yellow	587	24	14	350
586-1205-204F	Blue	470	24	10	85
586-1206-204F	White	*	24	14	580
586-1201-205F	Red	615	28	14	350
586-1202-205F	Green	528	28	10	210
586-1203-205F	Yellow	587	28	14	350
586-1205-205F	Blue	470	28	10	80
586-1206-205F	White	*	28	14	540

<sup>\*</sup> Color coordinates: x=0.330, y=0.330

### Multi-Chip Based LED - T1 3/4 Wedge

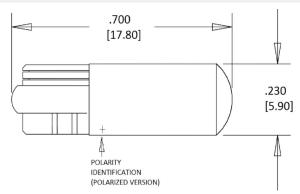


#### Features/Benefits:

- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- AllnGaP and InGaN die technology
- True non-polarized configurations available
- No heat generated

Specifications					
Base:	T1 3/4 Wedge				
Voltage Options:	6,14, and 28 V DC				
Operating Temp:	-20°C to +60°C (-4°F to +140°F)				
Storage Temp:	-30°C to +100°C (-22°F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)		
	Polarized LED Bulbs						
585-2211	Red	660	6	50	67		
585-2311	Green	565	6	46	77		
585-2411	Yellow	585	6	44	22		
585-2213	Red	660	14	30	60		
585-2313	Green	565	14	28	70		
585-2413	Yellow	585	14	30	23		
585-2215	Red	660	28	16	64		
585-2315	Green	565	28	15	75		
585-2415	Yellow	585	28	15	23		
		Non-Polarize	ed LED Bulbs				
585-2221	Red	660	6	75	50		
585-2321	Green	565	6	67	56		
585-2421	Yellow	585	6	73	18		
585-2223	Red	660	14	26	50		
585-2323	Green	565	14	23	56		
585-2423	Yellow	585	14	24	18		
585-2225	Red	660	28	14	56		
585-2325	Green	565	28	13	65		
585-2425	Yellow	585	28	13	20		

### Single-Chip Based LED - T1 3/4 Bi-pin

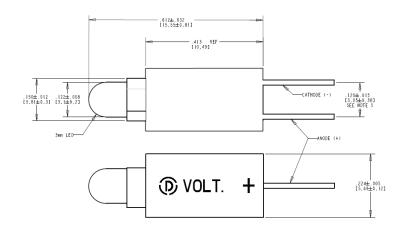


#### Features/Benefits:

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- AllnGaP and InGaN die technology
- Super bright single chip design
- No heat generated

Specifications					
Voltage Options:	6,14, and 28 V DC				
Operating Temp:	-30°C to +80°C (-22°F to +176°F)				
Storage Temp:	-40°C to +85°C (-40F to +185°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
586-1301-101F	Red	626	6	10	90
586-1302-101F	Green	525	6	10	1700
586-1303-101F	Yellow	590	6	10	110
586-1305-101F	Blue	470	6	10	500
586-1306-101F	White	*	6	10	635
586-1301-103F	Red	626	14	10	90
586-1302-103F	Green	525	14	10	1700
586-1303-103F	Yellow	590	14	10	110
586-1305-103F	Blue	470	14	10	500
586-1306-103F	White	*	14	10	635
586-1301-105F	Red	626	28	10	90
586-1302-105F	Green	525	28	10	1700
586-1303-105F	Yellow	590	28	10	110
586-1305-105F	Blue	470	28	10	500
586-1306-105F	White	*	28	10	635

<sup>\*</sup> Color coordinates: x=0.320, y=0.320

### Multi-Chip Based LED - T1 3/4 Bi-pin

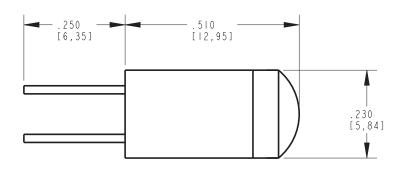


#### Features/Benefits

- Longer life
- Energy savings 90% less power required
- Mounts directly into industry standard socket
- True non-polarized configuration available
- Polarized and non-polarized
- No heat generated

Specifications					
Voltage Options:	6,14, and 28 V DC				
Operating Temp:	-20°C to +60°C (-4°F to +140°F)				
Storage Temp:	-30°C to +100°C (-22F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)		
	Polarized LED Bulbs						
585-3211	Red	660	6	50	67		
585-3311	Green	565	6	46	77		
585-3411	Yellow	585	6	44	22		
585-3213	Red	660	14	30	60		
585-3313	Green	565	14	28	70		
585-3413	Yellow	585	14	30	23		
585-3215	Red	660	28	16	64		
585-3315	Green	565	28	15	75		
585-3415	Yellow	585	28	15	23		
		Non-Polarized	LED Bulbs				
585-3221	Red	660	6	75	50		
585-3321	Green	565	6	67	56		
585-3421	Yellow	585	6	73	18		
585-3223	Red	660	14	26	50		
585-3323	Green	565	14	23	56		
585-3423	Yellow	585	14	24	18		
585-3225	Red	660	28	14	56		
585-3325	Green	565	28	13	65		
585-3425	Yellow	585	28	13	20		

### Single-Chip Based LED - T2 Telephone Slide (type 3)

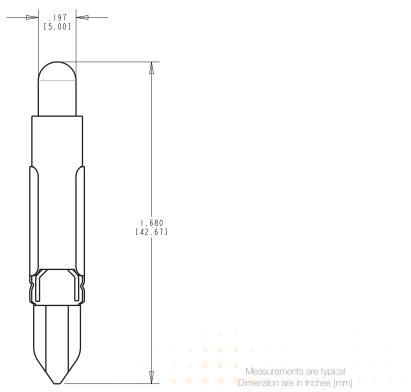


#### Features/Benefits

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounted directly into industry standard socket
- Super bright single-chip design
- No heat generated

Specifications					
Base:	T2 Telephone Slide				
Voltage Options:	24 V DC				
Operating Temp:	-30°C to +80°C (-22°F to +176°F)				
Storage Temp:	-40°C to +85°C (-40F to +185°F)				

#### **Dimensions**



Part Number Color		Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)		
	Polarized LED Bulbs						
586-3501-204F	Red	622	24	25	600		
586-3502-204F	Green	525	24	25	5000		
586-3503-204F	Yellow	592	24	25	1700		
586-3505-204F	Blue	470	24	25	1500		
586-3506-204F	White	*	24	25	5600		

<sup>\*</sup> Color coordinates: x=0.290, y=0.305

### Single-Chip Based LED - T3-1/4 Miniature Bayonet (BA9s)

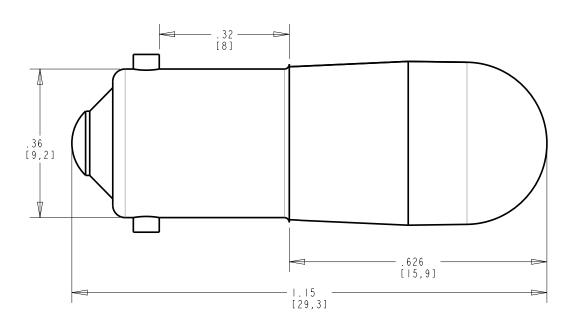


#### Features/Benefits:

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- True non-polarized configurations available
- No heat generated
- Super bright single chip design

Specifications					
Base:	T3 1/4 Miniature Bayonet (BA9s)				
Voltage Options:	6,14, and 28 V DC, 6-36 V DC				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
		Polarize	d LED Bulbs	· · · · · · · · · · · · · · · · · · ·	
586-2401-101F	Red	630	6	15	1050
586-2402-101F	Green	525	6	15	1650
586-2403-101F	Yellow	592	6	15	1275
586-2405-101F	Blue	470	6	15	487
586-2406-101F	White	*	6	15	825
586-2401-103F	Red	630	14	15	1050
586-2402-103F	Green	525	14	15	1650
586-2403-103F	Yellow	592	14	15	1275
586-2405-103F	Blue	470	14	15	487
586-2406-103F	White	*	14	15	825
586-2401-105F	Red	630	28	15	1050
586-2402-105F	Green	525	28	15	1650
586-2403-105F	Yellow	592	28	15	1275
586-2405-105F	Blue	470	28	15	487
586-2406-105F	White	*	28	15	825
586-2401-220F	Red	630	6-36	10	1000
586-2402-220F	Green	525	6-36	10	1500
586-2403-220F	Yellow	592	6-36	10	550
586-2405-220F	Blue	470	6-36	10	200
586-2406-220F	White	*	6-36	10	650
		Non-Polar	ized LED Bulbs		
586-2401-201F	Red	630	6	15	1050
586-2402-201F	Green	525	6	15	1650
586-2403-201F	Yellow	592	6	15	1275
586-2405-201F	Blue	470	6	15	487
586-2406-201F	White	*	6	15	825
586-2401-203F	Red	630	14	15	1050
586-2402-203F	Green	525	14	15	1650
586-2403-203F	Yellow	592	14	15	1275
586-2405-203F	Blue	470	14	15	487
586-2406-203F	White	*	14	15	825
586-2401-205F	Red	630	28	7.5	525
586-2402-205F	Green	525	28	7.5	825
586-2403-205F	Yellow	592	28	7.5	637
586-2405-205F	Blue	470	28	7.5	243
586-2406-205F	White	*	28	7.5	412

<sup>\*</sup> Color coordinates: x=0.330, y=0.365

# Daylight Viewable Cluster Based LED - T3 1/4 Miniature Bayonet Base (BA9s)

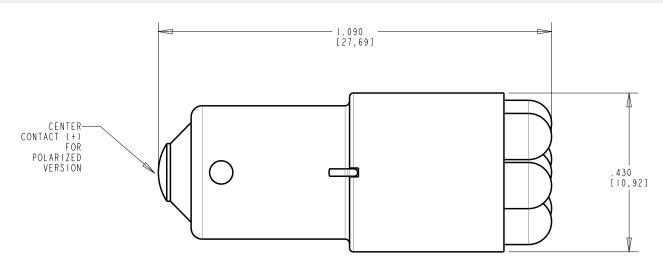


#### Features/Benefits

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard sockets
- Polarized and non-polarized
- Super bright LED cluster design

Specifications					
Base:	T3 1/4 Miniature Bayonet (BA9s)				
Voltage Options:	6,14, and 28 V DC; 120 V AC				
Operating Temp:	-30C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40F to +212°F)				

#### **Dimensions**



### **Ordering Information**

Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Forward Current Typ. (mA)	Intensity Typ. (mcd)				
	Polarized LED Bulbs								
586-6401-101F	Red	630	6	100	1000				
586-6402-101F	Green	525	6	90	3800				
586-6403-101F	Yellow	592	6	100	2000				
586-6405-101F	Blue	470	6	90	850				
586-6406-101F	White	*	6	90	4800				
586-6401-103F	Red	630	14	50	1000				
586-6402-103F	Green	525	14	40	3100				
586-6403-103F	Yellow	592	14	50	2000				
586-6405-103F	Blue	470	14	40	685				
586-6406-103F	White	*	14	40	4800				
586-6401-105F	Red	630	28	17	1000				
586-6402-105F	Green	525	28	13	3600				
586-6403-105F	Yellow	592	28	17	2000				
586-6405-105F	Blue	470	28	13	780				
586-6406-105F	White	*	28	13	4200				
		Non-	Polarized LED B	ulbs					
586-6401-201F	Red	630	6	100	1000				
586-6402-201F	Green	525	6	70	3400				
586-6403-201F	Yellow	592	6	100	2000				
586-6405-201F	Blue	470	6	70	685				
586-6406-201F	White	*	6	70	4000				
586-6401-203F	Red	630	14	50	1000				
586-6402-203F	Green	525	14	40	3400				
586-6403-203F	Yellow	592	14	50	2000				
586-6405-203F	Blue	470	14	40	685				
586-6406-203F	White	*	14	40	4000				
586-6401-205F	Red	630	28	18	1000				
586-6402-205F	Green	525	28	11	3400				
586-6403-205F	Yellow	592	28	18	2000				
586-6405-205F	Blue	470	28	11	685				
586-6406-205F	White	*	28	11	4000				
586-6401-206F	Red	630	120 V AC	9	500				
586-6402-206F	Green	526	120 V AC	9	2400				
586-6403-206F	Yellow	592	120 V AC	9	1000				
586-6405-206F	Blue	472	120 V AC	9	565				
586-6406-206F	White	*	120 V AC	9	3000				

<sup>\*</sup> Color coordinates: x=0.296, y=0.276

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### Cluster Based LED - T3 1/4 Miniature Bayonet (BA9s)

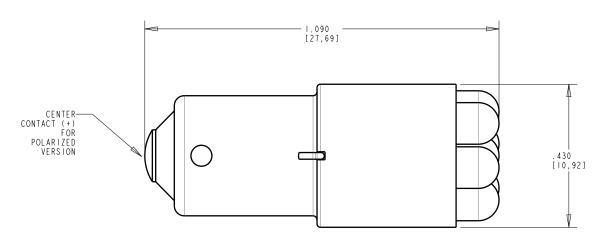


#### Features/Benefits

- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mount directly into industry standard socket
- Super bright LED cluster design
- Polarized and non-polarized
- No heat generated

Specifications					
Base:	T3 1/4 Miniature Bayonet (BA9s)				
Voltage Options:	6, 14 and 28 V DC; 120 V AC				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)		
	Polarized LED Bulbs						
585-5211F	Red	660	6	60	480		
585-5311F	Green	565	6	60	420		
585-5511F	Yellow	592	6	90	1800		
585-5213F	Red	660	14	40	480		
585-5313F	Green	565	14	40	420		
585-5513F	Yellow	592	14	60	1800		
585-5215F	Red	660	28	20	560		
585-5315F	Green	565	28	20	490		
585-5515F	Yellow	592	28	30	2100		
		Non-Polarized	LED Bulbs				
585-5223F	Red	660	14	40	480		
585-5323F	Green	565	14	40	420		
585-5523F	Yellow	592	14	60	1800		
585-5225F	Red	660	28	20	560		
585-5325F	Green	565	28	20	490		
585-5525F	Yellow	592	28	30	2100		
585-5256F	Red	660	120 V AC	9	252		
585-5356F	Green	565	120 V AC	9	220		
585-5556F	Yellow	585	120 V AC	9	945		

### Single Chip Based LED - T3 1/4 Miniature Screw (E10)

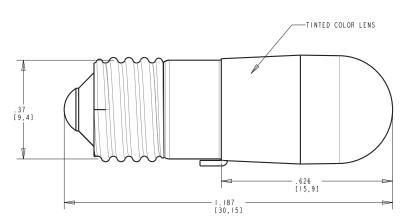


#### Features / Benefits:

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounting directly into industry standard socket
- True non-polarized configuration
- Super bright single chip design

Specifications					
Base:	T3 1/4 Miniature Screw (E10)				
Voltage Options:	6, 14 and 28 V DC, 6-36 V DC				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
586-2701-201F	Red	630	6	15	1050
586-2702-201F	Green	525	6	15	1650
586-2703-201F	Yellow	592	6	15	1275
586-2705-201F	Blue	470	6	15	487
586-2706-201F	White	*	6	15	825
586-2701-203F	Red	630	14	15	1050
586-2702-203F	Green	525	14	15	1650
586-2703-203F	Yellow	592	14	15	1275
586-2705-203F	Blue	470	14	15	487
586-2706-203F	White	*	14	15	825
586-2701-205F	Red	630	28	7.5	525
586-2702-205F	Green	525	28	7.5	825
586-2703-205F	Yellow	592	28	7.5	637
586-2705-205F	Blue	470	28	7.5	243
586-2706-205F	White	*	28	7.5	412
586-2701-220F	Red	630	6-36	10	1000
586-2702-220F	Green	525	6-36	10	1500
586-2703-220F	Yellow	592	6-36	10	550
586-2705-220F	Blue	470	6-36	10	200
586-2706-220F	White	*	6-36	10	650

<sup>\*</sup> Color coordinates: x=0.330, y=0.365

## Based LED - T3 1/4 Wedge (T10)

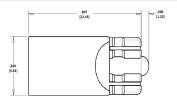


#### Features/Benefits

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- · Mounts directly into industry standard socket
- Unique multi-LED design provides superior illumination and ability
- No head generated

Specifications					
Base:	T3 1/4 Wedge (T10)				
Voltage Options:	6, 12, 14 and 24 V DC				
Operating Temp:	-30°C to +85°C (-22°F to +185°F)				
Storage Temp:	-40°C to +100°C (-40°F to +212°F)				

#### **Dimensions**



Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)
586-2201-201F	Red	615	6	69	770
586-2202-201F	Green	528	6	30	300
586-2203-201F	Yellow	591	6	69	550
586-2205-201F	Bue	470	6	30	90
586-2206-201F	White	*	6	30	630
586-2201-202F	Red	615	12	37	820
586-2202-202F	Green	528	12	19	380
586-2203-202F	Yellow	591	12	37	590
586-2205-202F	Blue	470	12	19	115
586-2206-202F	White	*	12	19	800
586-220A-202F	White/Yellow	* / 591	12	25	725
586-220B-202F	White/Orange	* / 610	12	25	775
586-2201-203F	Red	615	14	41	910
586-2202-203F	Green	528	14	24	480
586-2203-203F	Yellow	591	14	41	650
586-2205-203F	Blue	470	14	24	145
586-2206-203F	White	*	14	24	1000
586-220A-203F	White/Yellow	* / 591	14	25	725
586-220B-203F	White/Orange	* / 610	14	25	775
586-2201-204F	Red	615	24	19	850
586-2202-204F	Green	528	24	12	480
586-2203-204F	Yellow	591	24	19	610
586-2205-204F	Blue	470	24	12	145
586-2206-204F	White	*	24	12	1000
586-220A-204F	White/Yellow	* / 591	24	14	810
586-220B-204F	White/Orange	* / 610	24	14	870

<sup>\*</sup> Color coordinates: x=0.320, y=0.310

## **586 Series**

## Cluster Based LED - 15mm Bayonet (BA15s)

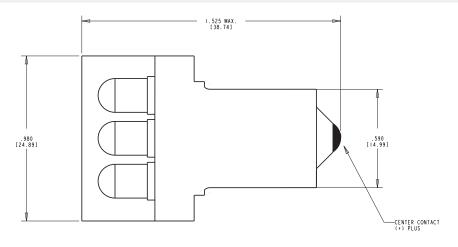


#### Features/Benefits:

- RoHS compliant
- Longer life
- Energy savings 90% less power required
- High reliability vibration and shock resistant
- Mounts directly into industry standard socket
- No heat generated

Specifications						
Base:	15mm Bayonet (BA15s)					
Voltage Options:	14 and 28 V DC					
Operating Temp:	-30°C to +85°C (-22°F to +185°F)					
Storage Temp:	-40°C to +100°C (-40°F to +212°F)					

#### **Dimensions**



Measurements are typical Dimension are in Inches [mm]

Part Number	Color	Peak Wavelength (nm)	Voltage (V DC)	Current Typ. (mA)	Intensity Typ. (mcd)				
Polarized LED Bulbs									
586-4601-103F	Red	639	14	30	17325				
586-4602-103F	Green	525	14	20	21000				
586-4603-103F	Yellow	594	14	30	17325				
586-4605-103F	Blue	470	14	20	6300				
586-4606-103F	White	*	14	20	23800				
586-4601-105F	Red	639	28	30	17325				
586-4602-105F	Green	525	28	20	21000				
586-4603-105F	Yellow	594	28	30	17325				
586-4605-105F	Blue	470	28	20	6300				
586-4606-105F	White	*	28	20	23800				

<sup>\*</sup> Color coordinates: x=0.310, y=0.320

# **Incandescent Lamp/Based LED**

Incandescent		D 011	Operating			Dialight E	Based LED Part	Number	
Lamp #	Size	Base Style	Voltage (V DC)	Configuration	Red	Green	Yellow	Blue	White
16	T1 <sup>3</sup> /4	Wedge Base	6	Polarized	586-1A01-101	586-1A02-101	586-1A03-101	586-1A05-101	586-1A06-101
10	11 5/4	vveuge base	O	Non-Polarized	586-1201-201	586-1202-201	586-1203-201	586-1205-201	586-1206-201
17	T1 3/4	Wedge Base	28	Polarized	586-1A01-105	586-1A02-105	586-1A03-105		
		-		Non-Polarized	586-1201-205	586-1202-205	586-1203-205		
18	T1 <sup>3</sup> /4	Wedge Base	14	Polarized Non-Polarized	586-1A01-103 586-1201-203	586-1A02-103 586-1202-203	586-1203-203	586-1A05-103 586-1205-203	
24	T2	Telephone Slide (Type 3)	24	Non-Polarized	586-3501 204	586-3502-204	586-3503-204	586-3505-204	586-3506-204
37	T1 <sup>3</sup> /4	Wedge Base	14	Polarized	586-1A01-103	586-1A02-103	586-1A03-103	586-1A05-103	586-1A06-103
31	11 5/4	vveuge base	14	Non-Polarized	586-1201-203	586-1202-203	586-1203-203	586-1205-203	586-1206-203
40, 46	T3 <sup>1</sup> /4	Miniature Screw	6	Non-Polarized	586-2701-201	586-2702-201	586-2703-201	586-2705-201	586-2706-201
44, 47	T3 <sup>1</sup> /4	Miniature Bayonet	6	Non-Polarized	586-6401-201	586-6402-201	586-6403-201	586-6405-201	586-6406-201
, <i>i</i>	10 /4	(BA9s)	U	High Brightness	586-2401-201	586-2402-201	586-2403-201	586-2405-201	586-2406-201
52	T3 <sup>1</sup> /4	Miniature Screw	14	Non-Polarized	586-2701-203	586-2702-203	586-2703-203	586-2705-203	586-2706-203
56	T1 <sup>3</sup> /4	Wedge Base	6	Polarized	586-1A01-101	586-1A02-101	586-1A03-101	586-1A05-101	586-1A06-101
				Non-Polarized	586-1201-201	586-1202-201	586-1203-201	586-1205-201	586-1206-201
67	G-6	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103
70, 73, 74	T1 <sup>3</sup> /4	Wedge Base	14	Polarized	586-1A01-103	586-1A02-103	586-1A03-103	586-1A05-103	586-1A06-103
,,				Non-Polarized	586-1201-203	586-1202-203	586-1203-203	586-1205-203	586-1206-203
79, 84	T1 <sup>3</sup> /4	Wedge Base	6	Polarized	586-1A01-101	586-1A02-101	586-1A03-101	586-1A05-101	
				Non-Polarized Polarized	586-1201-201 586-1A01-105	586-1202-201 586-1A02-105	586-1203-201 586-1A03-105	586-1205-201 586-1A05-105	
85	T1 <sup>3</sup> /4	Wedge Base	28	Non-Polarized	586-1201-205	586-1202-205	586-1203-205	586-1205-205	
00	T1 <sup>3</sup> /4	W 1 5	0	Polarized	586-1A01-101	586-1A02-101	586-1A03-101	586-1A05-101	586-1A06-101
86	11 9/4	Wedge Base	6	Non-Polarized	586-1201-201	586-1202-201	586-1203-201	586-1205-201	586-1206-201
93, 97, 98, 105	G-6 / S-8	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103
124	T3 <sup>1</sup> /4	Wedge Base	14	Non-Polarized	586-2201-203	586-2202-203	586-2203-203	586-2205-203	586-2206-203
152	T3 <sup>1</sup> /4	Wedge Base	28	Non-Polarized	586-2201-205	586-2202-205	586-2203-205	586-2205-205	586-2206-205
158, 161, 168	T3 <sup>1</sup> /4	Wedge Base	14	Non-Polarized	586-2201-203	586-2202-203	586-2203-203	586-2205-203	586-2206-203
159	T3 <sup>1</sup> /4	Wedge Base	6	Non-Polarized	586-2201-201	586-2202-201	586-2203-201	586-2205-201	586-2206-201
181	T3 <sup>1</sup> /4	Miniature Bayonet (BA9s)	14	Non-Polarized High Brightness	586-6401-203 586-2401-203			586-6405-203 586-2405-203	
184, 193, 194	T3 <sup>1</sup> /4	Wedge Base	14	Non-Polarized	586-2201-203	586-2202-203	586-2203-203	586-2205-203	586-2206-203
199	S-8	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103

# Incandescent Lamp/Based LED

Incandescent	0:	5 011	Operating	0 5 11		Dialight	Based LED Par	t Number	
Lamp #	Size	Base Style	Voltage (V DC)	Configuration	Red	Green	Yellow	Blue	White
216	T3 <sup>1</sup> /4	Miniature Bayonet	14	Non-Polarized High Brightness	586-6401-203	586-6402-203	586-6403-203	586-6405-203	586-6406-203
		(BA9s)		Non-Polarized	586-2401-203	586-2402-203	586-2403-203	586-2405-203	586-2406-203
259	T3 <sup>1</sup> /4	Wedge Base	6	Non-Polarized	586-2201-201	586-2202-201	586-2203-201	586-2205-201	586-2206-201
303, 305, 307, 315	S-8	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
313	T3 <sup>1</sup> /4	Miniature Bayonet (BA9s)	28	Non-Polarized High Brightness	586-6401-205	586-6402-205	586-6403-205	586-6405-205	586-6406-205
		(DA03)		Non-Polarized	586-2401-205	586-2402-205	586-2403-205	586-2405-205	586-2406-205
327	T1 <sup>3</sup> /4	Midget Flange	28	Polarized	586-1101-105	586-1102-105	586-1103-105	586-1105-105	586-1106-105
328	T1 <sup>3</sup> /4	Midget Flange	6	Polarized	586-1101-101	586-1102-101	586-1103-101	586-1105-101	586-1106-101
330	T1 <sup>3</sup> /4	Midget Flange	14	Polarized	586-1101-103	586-1102-103	586-1103-103	586-1105-103	586-1106-103
345, 349, 350	T1 <sup>3</sup> /4	Midget Flange	6	Polarized	586-1101-101	586-1102-101	586-1103-101	586-1105-101	586-1106-101
376	T1 <sup>3</sup> /4	Midget Flange	28	Polarized	586-1101-105	586-1102-105	586-1103-105	586-1105-105	586-1106-105
377, 380, 381	T1 <sup>3</sup> /4	Midget Flange	6	Polarized	586-1101-101	586-1102-101	586-1103-101	586-1105-101	586-1106-101
382	T1 <sup>3</sup> /4	Midget Flange	14	Polarized	586-1101-103	586-1102-103	586-1103-103	586-1105-103	586-1106-103
385, 387	T1 <sup>3</sup> /4	Midget Flange	28	Polarized	586-1101-105	586-1102-105	586-1103-105	586-1105-105	586-1106-105
394	T1 <sup>3</sup> /4	Midget Flange	14	Polarized	586-1101-103	586-1102-103	586-1103-103	586-1105-103	586-1106-103
400, 464, 585, 655, 656, 657	T3 <sup>1</sup> /4	Wedge Base	28	Non-Polarized	586-2201-205	586-2202-205	586-2203-205	586-2205-205	586-2206-205
658	T3 <sup>1</sup> /4	Wedge Base	14	Non-Polarized	586-2201-203	586-2202-203	586-2203-203	586-2205-203	586-2206-203
444, 447	T3 <sup>1</sup> /4	Wedge Base	6	Non-Polarized	586-2201-201	586-2202-201	586-2203-201	586-2205-201	586-2206-201
502	T3 <sup>1</sup> /4	Miniature Screw	6	Non-Polarized	586-2701-201	586-2702-201	586-2703-201	586-2705-201	586-2706-201
555	T3 <sup>1</sup> /4	Wedge Base	6	Non-Polarized	586-2201-201	586-2202-201	586-2203-201	586-2205-201	586-2206-201
623	G-6	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
631	G-6	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103
755	T3 <sup>1</sup> /4	Miniature Bayonet	6	Non-Polarized High Brightness	586-6401-201	586-6402-201	586-6403-201	586-6405-201	586-6406-201
		(BA9s)		Non-Polarized	586-2401-201	586-2402-201	586-2403-201	586-2405-201	586-2406-201
756	T3 <sup>1</sup> /4	Miniature Bayonet (BA9s)	14	Non-Polarized High Brightness	586-6401-203	586-6402-203	586-6403-203	586-6405-203	586-6406-203
		(DA9S)		Non-Polarized	586-2401-203	586-2402-203	586-2403-203	586-2405-203	586-2406-203
757	T3 <sup>1</sup> /4	Miniature Bayonet (BA9s)	28	Non-Polarized High Brightness				586-6405-205	
1003 1003				Non-Polarized	586-2401-205	586-2402-205	586-2403-205	586-2405-205	586-2406-205
1003, 1093, 1095, 1141, 1155, 1156, 1159	B-6/ S-8	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103

# Incandescent Lamp/Based LED

Incandescent	Size	Base Style	Operating	Configuration		Dialight E	Based LED Part	Number	
Lamp #	Size	Dase Style	Voltage	Comgulation	Red	Green	Yellow	Blue	White
1203, 1251	S-8	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
1295	S-8	Single Contact Bayonet (BA15s)	14	Polarized	586-4601-103	586-4602-103	586-4603-103	586-4605-103	586-4606-103
1308	B-6	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
1446, 1481, 1487	T3 <sup>1</sup> /4	Miniature Screw	14	Non-Polarized	586-2701-203	586-2702-203	586-2703-203	586-2705-203	586-2706-203
1488	T3 <sup>1</sup> /4	Miniature Bayonet	14	Non-Polarized High Brightness	586-6401-203	586-6402-203	586-6403-203	586-6405-203	586-6406-203
		(BA9s)		Non-Polarized	586-2401-203	586-2402-203	586-2403-203	586-2405-203	586-2406-203
1591, 1665, 1683, 1691	S-8	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
1813, 1815	T3 <sup>1</sup> /4	Miniature Bayonet	14	Non-Polarized High Brightness	586-6401-203	586-6402-203	586-6403-203	586-6405-203	586-6406-203
1010, 1010	10 /4	(BA9s)	17	Non-Polarized	586-2401-203	586-2402-203	586-2403-203	586-2405-203	586-2406-203
1819. 1820	T3 <sup>1</sup> /4	Miniature Bayonet	28	Non-Polarized High Brightness	586-6401-205	586-6402-205	586-6403-205	586-6405-205	586-6406-205
1010, 1020	10 /4	(BA9s)	20	Non-Polarized	586-2401-205	586-2402-205	586-2403-205	586-2405-205	586-2406-205
1821	T3 <sup>1</sup> /4	Miniature Screw	28	Non-Polarized	586-2701-205	586-2702-205	586-2703-205	586-2705-205	586-2706-205
1829, 1843	T3 <sup>1</sup> /4	Miniature Bayonet	28	Non-Polarized High Brightness	586-6401-205	586-6402-205	586-6403-205	586-6405-205	586-6406-205
1020, 1040	10 /4	(BA9s)	20	Non-Polarized	586-2401-205	586-2402-205	586-2403-205	586-2405-205	586-2406-205
1847, 1850,	T3 <sup>1</sup> /4	Miniature Bayonet	6	Non-Polarized High Brightness	586-6401-201	586-6402-201	586-6403-201	586-6405-201	586-6406-201
1866	.0 ,.	(BA9s)	Ü	Non-Polarized	586-2401-201	586-2402-201	586-2403-201	586-2405-201	586-2406-201
1864, 1873	T3 <sup>1</sup> /4	Miniature Bayonet	28	Non-Polarized High Brightness	586-6401-205	586-6402-205	586-6403-205	586-6405-205	586-6406-205
,	.0 ,.	(BA9s)	20	Non-Polarized	586-2401-205	586-2402-205	586-2403-205	586-2405-205	586-2406-205
1889, 1891, 1892, 1893,	T3 <sup>1</sup> /4	3 1/4 Miniature Bayonet (BA9s)	14	Non-Polarized High Brightness	586-6401-203	586-6402-203	586-6403-203	586-6405-203	586-6406-203
1894, 1898	10 /1		(BA9s)		Non-Polarized	586-2401-203	586-2402-203	586-2403-203	586-2405-203
2232, 2233	S-8	Single Contact Bayonet (BA15s)	28	Polarized	586-4601-105	586-4602-105	586-4603-105	586-4605-105	586-4606-105
2306	T1 <sup>3</sup> /4	Bi-Pin	6	Polarized	586-1301-101	586-1302-101	586-1303-101	586-1305-101	586-1306-101
2312, 2314	T1 <sup>3</sup> /4	Bi-Pin	28	Polarized	586-1301-105	586-1302-105	586-1303-105	586-1305-105	586-1306-105
2323	T1 <sup>3</sup> /4	Bi-Pin	6	Polarized	586-1301-101	586-1302-101	586-1303-101	586-1305-101	586-1306-101
2324, 2325	T1 <sup>3</sup> /4	Bi-Pin	28	Polarized	586-1301-105	586-1302-105	586-1303-105	586-1305-105	586-1306-105

## **Cross Reference**



#### 250 & 508 Holders use 507 Cartridges and 515 Connectors

Mounting Hole Size: 3/8" (9.53mm)
Light Source: Neon Cartridge

Incandescent Cartridge

LED Cartridge

Available Colors: Red, Yellow, White, Clear, Green

Voltage: 105-125V AC/DC (Neon)

10, 14, 28, 48, 120V DC (Incandescent & LED)

**Termination:** Bi-Pins, Solder, turret **Mounting Style:** Front or Rear

\*For more information please go to www.dialight.com



### 004 Holder uses 004 Caps and 113 Caps

Mounting Hole Size: 15/32" (11.91mm)

Light Source: T1 3/4 Midget Flange

Available Colors:Red, ClearVoltage:1.35-28VTermination:Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 101 Holder uses 101 Caps, 111 Caps, 140 Caps

Mounting Hole Size: 15/32" (11.91mm)
Light Source: 13/4 Midget Flange

Available Colors: Red, Yellow, White, Clear, Green

Voltage: 1.35-28V

Termination: Solder

Mounting Style: Front or Rear

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 812 Holder uses 812 Caps

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget Flange

Available Colors: Red, Yellow, White, Clear, Green

Voltage: 1.35-28V

Termination: Solder

Mounting Style: Rear

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available

## **Cross Reference**



## 137 Holder uses 137 caps

Mounting Hole Size:15/32' (11.91mm)Light Source:T2 Neon Midget FlangeAvailable Colors:Red, Yellow, White, ClearVoltage:105-125V AC/DC

Termination: Solder Mounting Style: Front

\*For more information please go to www.dialight.com



#### 162 Holder uses 162 caps

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget Flange

Available Colors: Red, Green, Yellow, White, Clear

Voltage: 1.35-28V
Termination: Solder
Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



### 177 Holder uses 177 caps

Mounting Hole Size: 15/32" (11.91mm)
Light Source: 13/4 Midget Flange

Available Colors: Red, Green, Yellow, White, Clear

Voltage: 1.35-28V
Termination: Solder
Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 270 Holder uses 270 caps, 271 Holder uses 271 caps

Mounting Hole Size: 15/32" (11.91mm)

Light Source: T1 3/4 Midget Flange Incandescent

Available Colors: Red, Green, Yellow, Clear

Voltage: 1.35-28V
Termination: Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



### 021 Series

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Bayonet (BA9s)

Available Colors: Clear Voltage: 2-120V

**Termination:** Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available

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## **Cross Reference**



#### 081 Holder uses 081 Caps, 052 Caps, 095 Caps, 135 Caps

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Neon Bayonet
Available Colors: Red, Yellow, White, Clear
Voltage: 105-125V AC/DC
Termination: Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



#### 125 Holder uses 125 Caps

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Bayonet (BA9s)

Available Colors: Red, Yellow, Green, White, Clear

Voltage: 2-120V

Termination: Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



### 125 Holder uses 125 Caps

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Neon Bayonet Available Colors: Red, Yellow, White, Clear

Voltage: 105-125 AC/DC

**Termination:** Solder or Screw, Quick-Connect

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 123 Holder uses 123 Caps

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Bayonet (BA9s)
Available Colors: Red, Yellow, Green, White, Clear

Voltage: 2-120V

**Termination:** Solder or Screw

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 095 Holder uses 095 caps, 135 caps

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Miniature Bayonet (BA9s)

Available Colors: Red, Yellow, Green, White, Clear

**Voltage:** 2-120V 2-120V

Termination: Solder or Screw, Quick-Connect

Mounting Style: Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available

## **Cross Reference**



## 031 Holder uses 031 Caps

Mounting Hole Size: 1" (25.40mm)

**Light Source:** S-6 Candelabra Screw Incandescent Red, Yellow, Green, White, Clear Available Colors:

6-250V AC/DC Voltage:

**Termination:** Screw Front **Mounting Style:** 

\*For more information please go to www.dialight.com



## 051 Holder uses 051 Caps

**Mounting Hole Size:** 1" (25.40mm)

Light Source: T3 1/4 Miniature Bayonet (BA9s) Available Colors: Red, Yellow, Green, White, Clear

Voltage: 2-120V

Termination: Solder or Screw

**Mounting Style:** Front

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 080 Holder uses 080 Caps, 051 Caps

Mounting Hole Size: 1" (25.40mm)

**Light Source:** S-6 Candelabra Screw Incandescent Available Colors: Red, Yellow, Green, White, Clear

6-250V AC/DC Voltage: Termination: Solder or Screw

**Mounting Style:** Front

\*For more information please go to www.dialight.com



#### 103 Holder uses 103 Caps

Mounting Hole Size: 1" (25.40mm)

Light Source: S-6 Candelabra Screw Incandescent Available Colors: Red, Yellow, Green, White, Clear

Voltage: 6-250V AC/DC Solder or Screw **Termination:** 

**Mounting Style:** Front

\*For more information please go to www.dialight.com



#### 103 Holder uses 103 Caps

Mounting Hole Size: 1" (25.40mm)

Light Source: S-6 Double Contact Bayonet Available Colors: Red, Yellow, Green, White, Clear

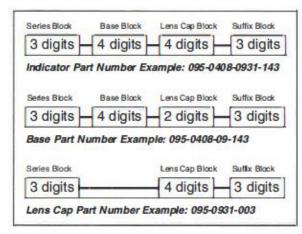
Voltage: 24-250V AC/DC Termination: Solder or Screw

**Mounting Style:** Front

\*For more information please go to www.dialight.com

# Neon & Incandescent Panel Mount Indicator Part Numbering System

Dialight Neon and Incandescent Panel Mount Indicators are available as complete assemblies from our distributor partners or from us as separate lens cap and base. Our Part Numbering System shown below describes how valid Dialight part numbers are configured. The Dialight Part Numbering System should not be used for creating part numbers since not all combinations are manufacturable. Please consult Dialight or our stocking distributors for those items not found in this catalog.



STEP	Lens Finish and Color	
2	095 - 0408 - 09 31 - 143	

The third and fourth digits of the Lens Cap Block designate the lens finish and color respectively. In this example, 31 = a transparent red lens.

Lens Finish	Lens Color
1 - Back Frosted*	1 - Red
3 - Unfrosted or Transparent	2 - Green
5 - Light Translucent	3 - Yellow (Amber)
7 - Dark Translucent**	4 - Blue
9 - Internal Fluting	5 - White
	6 - Light Yellow
	7 - Clear (Colorless)

- \* Not available with Lens Color Option 5 (White)
- \*\* Not available with Lens Color Option 7 (Clear/Colorless)

STEP	Lens Shape and Material
	095 - 0408 - 09 31 - 143
	095 - 09 31 - 003
A ALL SHAPE OF THE SAME OF THE	

The first two digits in the Lens Cap Block of the indicator, base or cap part numbers designate the lens shape and material. In this example, 09 = plastic stovepipe.

Lens Code	Description
00	Rectangular, plastic
01	Convex, polycarbonate
02	Flat, polycarbonate
03	Flat, plastic
04	Convex, faceted, polycarbonate
05	Torpedo, polycarbonate
06	Convex, plastic
08	Dome, plastic
09	Stovepipe, plastic
11	Stovepipe, polycarbonate with bezel
12	Dome, polycarbonate
13	Torpedo faceted, polycarbonate
14	Short cylindrical, plastic
15	Long cylindrical, plastic
16	Long cylindrical, fresnel, plastic
18	Square, plastic
21	Faceted, plastic
29	Light shield
31	Stovepipe, polycarbonate
32	Short cylindrical, polycarbonate
33	Short cylindrical, fresnel, plastic
34	Rectangular, plastic
35	Short cylindrical, fresnel, polycarbonate
37	Short stovepipe, fresnel, plastic
50	Black opaque side wall



The first digit of the Suffix Block designates metal finish. In this example, 1 = white nickel plated metal finish.

#### Metal Finish

0 - None
1 - White Nickel
2 - Black Nickel
3 - Polished Chrome

4 - Safin Chrome 5 - Black Anodized

6 - Clear Anodized 7 - Chromate

STEP	Built-in Resistor	
4	095 - 0408 - 0931 - 1 4 3	

The second digit of the Suffix Block designates built-in resistor. In this neon indicator example, 4 = 56 K internal resistor.

0 - None	4 - 56K
1 - 2K	6 - 68K
2 - 27K	7 - 100k
3 - 33K	

STEP	Hardware		
5	095 - 0408 - 0931 - 143		

The third digit of the Suffix Block designates type of hardware. In this example, 3 = watertight.

 0 - None
 4 - Aluminum

 1 - Brass
 5 - Three rings

 2 - Steel
 6 - Ring, lockwasher, nut

 3 - Waterlight
 7 - Insulated mounting

<sup>\*</sup> Due to inventory purposes the 14 digit part number has now been separated into the appropriate cap and base numbers.

**LHC** = lampholder with cap

**LH** = lampholder only

**LC** = lens cap only

All indicators must meet or exceed Military specifications.

All lamps are daylight viewable.



### 359 Series LH73/1, LC11

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget
Available Colors: Red, Green, Yellow

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 360 Series LH73/1, LC11, LC12, LC29

Mounting Hole Size:15/32" (11.91mm)Light Source:T1 3/4 MidgetAvailable Colors:Red, Green, Yellow

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



#### 361 Series LH74/1, LC13

Mounting Hole Size:15/32" (11.91mm)Light Source:T2 (C7A) NeonAvailable Colors:Red, Yellow, ClearVoltage:120 VAC/DCTermination:Solder TabsMounting Style:Nut and Washer

Relampable: Yes

\*For more information please go to www.dialight.com



#### 363 Series LH73/2, LC25

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget
Available Colors: Red, Yellow, Clear

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available

**LHC** = lampholder with cap

**LH** = lampholder only

**LC** = lens cap only

All indicators must meet or exceed Military specifications.

All lamps are daylight viewable.



#### 367 Series LH89/1, LC25

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget
Available Colors: Red, Green, Yellow

Voltage: 2.7-28V

Termination: Solder Tabs

Mounting Style: Nut and Washer

Relampable: Yes

**Features:** Oiltight \*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 368 and 369 Series LH89/1, LC35. LC36. LC37

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget
Available Colors: Red, Green, Yellow

Voltage:2.7-28VTermination:Solder TabsMounting Style:Nut and Washer

**Relampable:** Yes **Features:** Oiltight

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



#### 800 Series MS25041

Mounting Hole Size: 15/32" (11.91mm)
Light Source: T1 3/4 Midget
Available Colors: Red, Green, Yellow

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Press to Test

\*For more information please go to www.dialight.com \*See page 74-76 for Based LED Bulbs Available



## 801 Series MS25041

Mounting Hole Size:15/32" (11.91mm)Light Source:T1 3/4 MidgetAvailable Colors:Red, Green, Yellow

Voltage: 2.7-28V

Termination: Solder Tabs

Mounting Style: Nut and Washer

Relampable: Yes

Features: Press to Test

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available

**LHC** = lampholder with cap

**LH** = lampholder only

**LC** = lens cap only

All indicators must meet or exceed Military specifications.

All lamps are daylight viewable.



#### 803 Series MS25331

Mounting Hole Size: 5/8" (15.88mm)

Light Source: T3 1/4 Mini Bayonet (BA9s)

Available Colors: Red, Green, Yellow, Clear, Blue

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Press to Test

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



#### 804 Series MS25331

Mounting Hole Size: 5/8" (15.88mm)
Light Source: T3 1/4 Mini Bayonet

Available Colors: Red, Green, Yellow, Clear, Blue

Voltage: 2.7-28V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Press to Test

\*For more information please go to www.dialight.com

\*See incandescent lamp cross reference guide for based LED bulbs available



## 373 Series LH76/1, LH 6/2, LH76/3, LC14

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Neon, T3 1/4 Mini Bayonet (BA9s)

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: 2-120V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Watertight Lens available for Semi and blackout

\*For more information please go to www.dialight.com



#### 375 Series LH76/1, LH7 6/2, LH7 6/3, LC17

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Neon, T3 1/4 Mini Bayonet (BA9s)

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: 2-120V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Watertight Lens available for Semi and blackout

\*For more information please go to www.dialight.com

**LHC** = lampholder with cap

**LH** = lampholder only

**LC** = lens cap only

All indicators must meet or exceed Military specifications.

All lamps are daylight viewable.



## 376 Series LH76/1, LH76/2, LH76/3, LC14, LC17, LC18

Mounting Hole Size: 11/16" (17.46mm)

Light Source: T3 1/4 Neon, T3 1/4 Mini Bayonet (BA9s)

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: 2-120V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Watertight Lens available for Semi and blackout

\*For more information please go to www.dialight.com



#### 378 Series LH79/1, LC21

Mounting Hole Size: 1" (25.40mm)

**Light Source:** S-6 Double Contact Bayonet

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: S6-32V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Lens available for Semi and blackout

\*For more information please go to www.dialight.com



### 379 Series LH79/1, LC24

Mounting Hole Size: 1" (25.40mm)

**Light Source:** S-6 Double Contact Bayonet

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: 24-250V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable: Yes

Features: Lens available for Semi and blackout

\*For more information please go to www.dialight.com



## 380 and 381 Series LH80/1, LC24

Mounting Hole Size: 1" (25.40mm)

**Light Source:** S-6 Double Contact Bayonet

Available Colors: Red, Green, Yellow, White, Clear, Blue

Voltage: 24-250V
Termination: Solder Tabs
Mounting Style: Nut and Washer

Relampable:

Features: Lens available for Semi and blackout

\*For more information please go to www.dialight.con

## Military cross reference guide

LC and LH, MS Military Designations to Dialight Part Numbers

## **MILITARY SPECIFICATION:**

MIL-DTL-3661C-Lampholders, Indicator Lights, Indicator-Light Housings, Indicator-Light Lenses

MILITARY DESIGNATION	DIALIGHT <u>PART NO.</u>	MILITARY DESIGNATION	DIALIGHT <u>PART NO.</u>	MILITARY DESIGNATION	DIALIGHT <u>PART NO.</u>
LC11BN2	178-0334-500 I	LC17RN3	*203-0131-203	LC23GN3	209-0132-203
LC11BT2		LC17WT3		LC23RD3	
LC11CN2	*178-0337-500	LC17YD3	203-0113-203	LC23RN3	*209-0131-203
LC11GN2	178-0332-500	LC17YN3	*203-0133-203	LC23WT3	*209-0135-203
LC11GT2		LC18BD3		LC23YD3	
LC11RN2	*178-0331-500	LC18BN3	204-0134-203	LC23YN3	*209-0133-203
LC11RT2	178-0371-500	LC18CD3		LC24BD3	210-0114-203
LC11WT2		LC18CN3		LC24BN3	
LC11YN2		LC18GD3		LC24CD3	
LC11YT2		LC18GN3		LC24CN3	
LC12BN2		LC18RD3		LC24GD3	
LC12BT2	162-0974	LC18RN3		LC24GN3	
LC12CN2		LC18YD3		LC24RD3	
LC12GN2		LC18YN3		LC24RN3	
LC12GT2		LC19BD3		LC24WT3	
LC12RN2		LC19BN3		LC24YD3	
LC12RT2		LC19CD3 LC19CN3		LC24YN3	
LC12WT2				LC25BN2	
LC12YN2 LC12YT2		LC19GD3 LC19GN3		LC25BT2 LC25CN2	
LC12Y12 LC13CN2		LC19GN3		LC25GN2	
LC13RN2		LC19RN3		LC25GN2 LC25GT2	
LC13WT2		LC19WT3		LC25G12 LC25RN2	
LC13V12		LC19V13		LC25RN2	
LC14BD3		LC19YN3		LC25WT2	
LC14BN3		LC20BN3		LC25YN2	
LC14CD3		LC20CN3		LC25YT2	
LC14CN3	*081-0137-203	LC20GN3		LC29BN2	
LC14GD3		LC20RN3		LC29BT2	
LC14GN3		LC20WT3		LC29CN2	
LC14RD3		LC20YN3		LC29GN2	
LC14RN3		LC21BD3		LC29GT2	
LC14WT3		LC21BN3		LC29RN2	
LC14YD3		LC21CD3		LC29RT2	
LC14YN3	*081-0133-203	LC21CN3	*051-0137-203	LC29WT2	162-1475
LC15BD3	026-1114-203	LC21GD3	051-0112-203	LC29YN2	*162-1433
LC15BN3	026-1134-203	LC21GN3	051-0132-203	LC29YT2	
LC15CN3	*026-1137-203	LC21RD3	051-0111-203	LC30BN3	250-3534-500
LC15GD3	026-1112-203	LC21RN3	*051-0131-203	LC30GN3	250-3532-500
LC15GN3		LC21WT3		LC30RN3	
LC15RD3	026-1111-203	LC21YD3		LC30WT3	250-3535-500
LC15RN3		LC21YN3		LC30YN3	
LC15WT3		LC22BD3		LC32BT2	
LC15YD3		LC22BN3		LC32GT2	
LC15YN3		LC22CD3		LC32RT2	
LC16BN3		LC22CN3		LC32WT2	
LC16CN3		LC22GD3		LC32YT2	
LC16GN3		LC22GN3		LC33CN2	
LC16RN3		LC22RD3		LC33RN2	
LC16WT3		LC22RN3		LC33WT2	
LC16YN3		LC22WT3 LC22YD3		LC33YN2	
LC17BD3 LC17BN3		LC22YD3 LC22YN3		LC34CN2/DO2 LC34CN2/SO2	
LC17BN3 LC17CD3		LC22YN3 LC23BD3		LC34CN2/SO2 LC34EN2/DO2	
LC17CD3		LC23BN3		LC34EN2/EN2	
LC17GD3		LC23CD3		LC34EN2/SO2	
LC17GN3		LC23CD3			128-0934-003
LC17RD3		LC23GD3		LC35BN2	
* Can be used with F			200 0112-200		120 001 + 000

<sup>\*</sup> Can be used with Based LED Replacement Lamps

## Military cross reference guide

LC and LH, MS Military Designations to Dialight Part Numbers

## **MILITARY SPECIFICATION:**

MIL-DTL-3661C-Lampholders, Indicator Lights, Indicator-Light Housings, Indicator-Light Lenses

#### \*\* See LHC82/1

## **MILITARY SPECIFICATION:**

MIL-L-7806-Light, Panel Plastic Plate Lighting

MS25010A11A *270-1930-0111-702	MS25010B11A *270-1830-0111-702	MS25010C11B *271-8430-0111-702
MS25010A12A *270-1930-0171-702	MS25010B12A *270-1830-0171-702	MS25010C12B *271-8430-0171-702
MS25010A13A *270-1930-3111-702	MS25010B13A *270-1830-3111-702	MS25010C13B *271-8430-3111-702
MS25010A14A CONSULT FACTORY	MS25010B14A CONSULT FACTORY	MS25010C14B *271-8430-3171-702
MS25010A15A *270-1930-0212-702	MS25010B15A *270-1830-0212-702	MS25010C15B *271-8430-0212-702
MS25010A16A *270-1930-0272-702	MS25010B16A *270-1830-0272-702	MS25010C16B *271-8430-0272-702

## **MILITARY SPECIFICATION:**

MIL-L-7961C-Light, Indicator, Press-to-Test

MS25041-1*801-1030-0337-504	MS25041-7800-1030-0332-504	MS25331-3804-1710-0332-504
MS25041-2*801-1030-0331-504	MS25041-8*800-1030-0333-504	MS25331-4804-1710-0333-504
MS25041-3801-1030-0332-504	MS25041-10801-1030-0334-504	MS25331-5803-1710-0337-504
MS25041-4*801-1030-0333-504	MS25041-11800-1030-0334-504	MS25331-6803-1710-0331-504
MS25041-5*800-1030-0337-504	MS25331-1804-1710-0337-504	MS25331-7803-1710-0332-504
MS25041-6*800-1030-0331-504	MS25331-2804-1710-0331-504	MS25331-8803-1710-0333-504

<sup>\*</sup>Can be used with Based LED Replacement Lamps.

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