



NTE3056 thru NTE3060 0.3" Single Digit Numeric Display, Seven Segment, Common Cathode

Description:

The NTE3056 through NTE3060 are 0.3 inch (7.62mm) height single digit, seven segment, common cathode displays. The NTE3056 and NTE3057 utilize LED chips which are made from GaAsP on a GaAs substrate. The NTE3059 utilizes LED chips which are made from GaP on a transparent GaP substrate. The NTE3058 and NTE3060 utilize LED chips which are made from GaAsP on a transparent GaP substrate.

Features:

- 0.3 Inch (7.62mm) Digit Height
- Choice of Four Bright Colors:
 - Red – NTE3056, NTE3057
 - Orange – NTE3058
 - Green – NTE3059
 - Yellow – NTE3060
- Low Power Requirement
- Excellent Characters Appearance
- Categorized for Luminous Intensity
- IC Compatible
- Easy Mounting on PC Board or Sockets

Absolute Maximum Ratings: ($T_A = +25^{\circ}\text{C}$ unless otherwise specified)

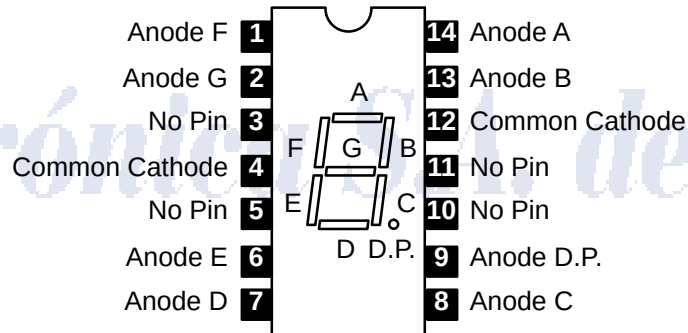
Power Dissipation (Per Segment), P_T	
NTE3056, NTE3057	55mW
NTE3058, NTE3059	75mW
NTE3060	60mW
Peak Forward Current (Per Segment, 1/10 Duty Cycle, 0.1ms Pulse Width), I_{Fpeak}	
NTE3056, NTE3057	160mA
NTE3058, NTE3059	100mA
NTE3060	80mA
Continuous Forward Current (Per Segment), I_F	
NTE3056, NTE3057, NTE3058, NTE3059	25mA
NTE3060	20mA
Derate Linearly from 25°C (Per Segment)	
NTE3056, NTE3057, NTE3058, NTE3059	0.30mA/ $^{\circ}\text{C}$
NTE3060	0.24mA/ $^{\circ}\text{C}$
Reverse Voltage (Per Segment), V_R	5V
Operating Temperature Range, T_{opr}	-25° to $+85^{\circ}\text{C}$
Storage Temperature Range, T_{stg}	-25° to $+85^{\circ}\text{C}$
Lead Temperature (During Solder, 1/16" Below Seating Plane, 3sec max), T_L	$+260^{\circ}\text{C}$

Electrical/Optical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Average Luminous Intensity NTE3056, NTE3057	I_V	$I_F = 10\text{mA}$	200	500	—	μcd
NTE3058, NTE3059, NTE3060			800	2000	—	μcd
Peak Emission Wavelength NTE3056, NTE3057	λ_P	$I_F = 20\text{mA}$	—	655	—	nm
NTE3058			—	630	—	nm
NTE3059			—	565	—	nm
NTE3060			—	585	—	nm
Spectral Line Half-Width NTE3056, NTE3057	$\Delta\lambda$	$I_F = 20\text{mA}$	—	24	—	nm
NTE3058			—	40	—	nm
NTE3059			—	30	—	nm
NTE3060			—	35	—	nm
Forward Voltage, Any Segment or D.P. NTE3056, NTE3057	V_F	$I_F = 20\text{mA}$	—	1.7	2.0	V
NTE3058, NTE3059, NTE3060			—	2.1	2.8	V
Reverse Current, Any Segment or D.P.	I_R	$V_R = 5\text{V}$	—	—	100	μA
Luminous Intensity Matching Ratio	I_{V-m}	$I_F = 20\text{mA}$	—	—	2:1	

Pin Connection Diagram

**NTE3056, NTE3058,
NTE3059, NTE3060**



NTE3057

