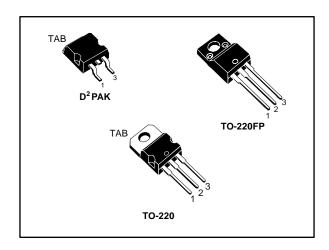


Negative voltage regulators

Datasheet - production data



Features

- Output current up to 1.5 A
- Output voltages: -5, -8, -12, and -5 V
- Thermal overload protection
- Short-circuit protection
- Output transition SOA protection
- Output tolerance 2% (AC version) or 4% (C version) at 25 °C

Description

The L79 series of three-terminal negative regulators is available in TO-220, TO-220FP and D2PAK packages and several fixed output voltages, making it useful in a wide range of applications.

These regulators can provide local on-card regulation, eliminating the distribution problems associated with single point regulation; furthermore, having the same voltage option as the L78 positive standard series, they are particularly suited for split power supplies. If adequate heat sinking is provided, they can deliver over 1.5 A output current.

Although designed primarily as fixed voltage regulators, these devices can be used with external components to obtain adjustable voltages and currents.

Table 1: Device summary

	Order codes						
TO-220 (single gauge)	TO-220 (dual gauge)	D²PAK	TO-220FP	Output voltages			
L7905ACV	L7905ACV-DG	L7905ACD2T-TR		-5 V			
L7905CV	L7905CV-DG	L7905CD2T-TR	L7905CP	-5 V			
L7908CV	L7908CV-DG			-8 V			
L7912ACV	L7912ACV-DG			-12 V			
L7912CV	L7912CV-DG	L7912CD2T-TR	L7912CP	-12 V			
L7915ACV	L7915ACV-DG			-15 V			
L7915CV	L7915CV-DG		L7915CP	-15 V			

September 2017 DocID2149 Rev 23 1/27

Contents L79

Contents

1	Diagran	n	5
2	Pin con	figuration	6
3	Maximu	ım ratings	7
4	Test cir	cuit	8
5	Electric	al characteristics	9
6	Applica	tion information	14
7	Packag	e information	16
	7.1	TO-220 (single gauge) package information	16
	7.2	TO-220 (dual gauge) package information	18
	7.3	TO-220FP package information	20
	7.4	D ² PAK (TO-263) type A package information	22
	7.5	D²PAK type A packing information	24
8	Revisio	n history	26



L79 List of tables

List of tables

Table 1: Device summary	1
Table 2: Absolute maximum ratings	7
Table 3: Thermal data	
Table 4: Electrical characteristics of L7905AC	9
Table 5: Electrical characteristics of L7905C	
Table 6: Electrical characteristics of L7908C	10
Table 7: Electrical characteristics of L7912AC	
Table 8: Electrical characteristics of L7912C	11
Table 9: Electrical characteristics of L7915AC	12
Table 10: Electrical characteristics of L7915C	13
Table 11: TO-220 (single gauge) package mechanical data	17
Table 12: TO-220 type A package mechanical data	19
Table 13: TO-220FP package mechanical data	21
Table 14: D ² PAK (TO-263) type A package mechanical data	22
Table 15: D ² PAK type A tape and reel mechanical data	25
Table 16: Document revision history	26



List of figures L79

List of figures

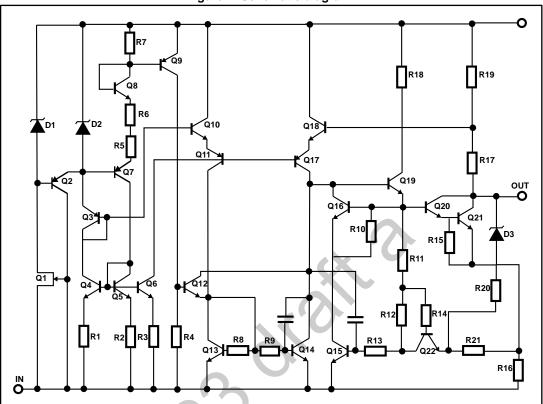
Figure 1: Schematic diagram	5
Figure 2: Pin connections (top view)	6
Figure 3: Test circuit	
Figure 4: Fixed output regulator	
Figure 5: Split power supply (±15 V - 1 A)	
Figure 6: Circuit for increasing output voltage	
Figure 7: High current negative regulator (-5 V / 4 A with 5 A current limiting)	
Figure 8: TO-220 (single gauge) package outline	
Figure 9: TO-220 type A package outline	
Figure 10: TO-220FP package outline	
Figure 11: D ² PAK (TO-263) type A package outline	
Figure 12: D ² PAK (TO-263) type A recommended footprint (dimensions are in mm)	
Figure 13: D ² PAK type A tape outline	
Figure 14: D ² PAK type A reel outline	



L79 Diagram

1 Diagram

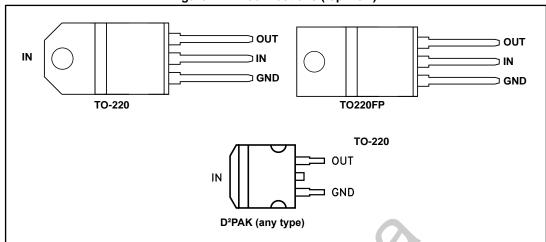
Figure 1: Schematic diagram



Pin configuration L79

2 Pin configuration

Figure 2: Pin connections (top view)





6/27 DocID2149 Rev 23

L79 Maximum ratings

3 Maximum ratings

Table 2: Absolute maximum ratings

Symbol	Parameter	Value	Unit	
Vı	DC input voltage		-35	V
lo	Output current	Internally limited		
PD	Power dissipation	Internally limited		
T _{STG}	Storage temperature range		-65 to 150	°C
T _{OP}	Operating junction temperature range	for L79xxC	0 to 150	°C
I OP	Operating junction temperature range	for L79xxAC	0 to 125	



Note: Absolute maximum ratings are those values beyond which damage to the device may occur. Functional operation under these condition is not implied.

Table 3: Thermal data

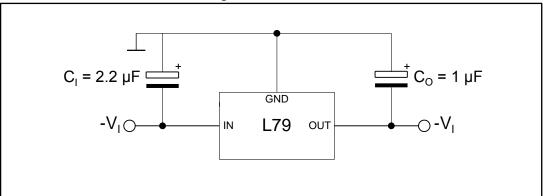
Symbol	Parameter	D ² PAK	TO-220	TO-220FP	Unit
R _{th} JC	Thermal resistance junction-case	3	5	5	°C/W
RthJA	Thermal resistance junction-ambient	62.5	50	60	°C/W



Test circuit L79

4 Test circuit

Figure 3: Test circuit





77/

8/27

L79 Electrical characteristics

5 Electrical characteristics

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -10 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 4: Electrical characteristics of L7905AC

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	-4.9	-5	-5.1	V
Vo	Output voltage	I_{O} = -5 mA to -1 A, P_{O} ≤ 15 W V_{I} = -8 to -20 V	-4.8	-5	-5.2	V
ΔV ₀ ⁽¹⁾	Line regulation	$V_1 = -7 \text{ to } -25 \text{ V}, T_J = 25^{\circ}\text{C}$			100	mV
Δνοιν	Line regulation	V _I = -8 to -12 V, T _J = 25 °C			50	mv
ΔV ₀ ⁽¹⁾	Lood regulation	$I_0 = 5 \text{ mA to } 1.5 \text{ A, T}_J = 25^{\circ}\text{C}$			100	mV
Δνοιν	Load regulation	I _O = 250 to 750 mA, T _J = 25°C			50	IIIV
Id	Quiescent current	T _J = 25°C			3	mA
Δld	Quiescent current change	I _O = 5 mA to 1 A	O		0.5	m Λ
ΔId		V _I = -8 to -25 V			1.3	mA
ΔV _O /ΔVT	Output voltage drift	I _O = 5 mA		-0.4		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, TJ = 25°C		100		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
Vd	Dropout voltage	$I_{O}=1$ A, $T_{J}=25^{\circ}C$, $\Delta V_{O}=100$ mV		1.4		V
Isc	Short circuit current	77		1.8		Α
Iscp	Short circuit peak current	T _J = 25°C		1.8		А

Notes:

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -10 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 5: Electrical characteristics of L7905C

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	-4.8	-5	-5.2	V
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, PO} \le 15 \text{ W}$ V _I = -8 to -20 V	- 4.75	-5	- 5.25	V
ΔV _Ω ⁽¹⁾	Line regulation	V _I = -7 to -25 V, T _J = 25°C			100	mV
Δνοι		V _I = -8 to -12 V, T _J = 25°C			50	mv
ΔV _O ⁽¹⁾	Load regulation	$I_0 = 5 \text{ mA to } 1.5 \text{ A, } T_J = 25^{\circ}\text{C}$			100	mV
Δνοί		$I_0 = 250 \text{ to } 750 \text{ mA}, T_J = 25^{\circ}\text{C}$			50	IIIV
Id	Quiescent current	T _J = 25°C			3	mA



DocID2149 Rev 23

9/27

⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

Electrical characteristics L79

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
ΔI_d	Quiescent current	I _O = 5 mA to 1 A			0.5	mA
ΔId	change	V _I = -8 to -25 V			1.3	IIIA
ΔV _O /ΔΤ	Output voltage drift	Io = 5 mA		-0.4		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		100		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
V _d	Dropout voltage	$I_O = 1 \text{ A}, T_J = 25^{\circ}\text{C}, \Delta V_O = 100 \text{ mV}$		1.4		V
I _{sc}	Short circuit current			1.8		Α

Notes:

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -14 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 6: Electrical characteristics of L7908C

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	-7.7	-8	-8.3	V
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, } P_0 \le 15 \text{ W,}$ $V_1 = -11.5 \text{ to } -23 \text{ V}$	-7.6	-8	-8.4	V
ΔV _O ⁽¹⁾	Line regulation	$V_I = -10.5 \text{ to } -25 \text{ V}, T_J = 25^{\circ}\text{C}$			160	mV
Δνοιν	Line regulation	V _I = -11 to -17 V, T _J = 25°C			80	IIIV
ΔV _O ⁽¹⁾	Lood regulation	$I_{O} = 5 \text{ mA to } 1.5 \text{ A}, T_{J} = 25^{\circ}\text{C}$			160	m\/
Δνοιν	Load regulation	$I_{O} = 250 \text{ to } 750 \text{ mA}, T_{J} = 25^{\circ}\text{C}$			80	mV
Id	Quiescent current	T _J = 25°C			3	mA
Δ1.	Quiescent current change	I _O = 5 mA to 1 A			0.5	m Λ
ΔI _d		V _I = -11.5 to -25 V			1	mA
ΔV _O /ΔΤ	Output voltage drift	I _O = 5 mA		-0.6		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		175		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
V _d	Dropout voltage	$I_0 = 1 \text{ A}, T_J = 25^{\circ}\text{C}, \Delta V_0 = 100 \text{ mV}$		1.1		V
I _{sc}	Short circuit current			1.5		Α

Notes:

⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

L79 Electrical characteristics

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -19 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 7: Electrical characteristics of L7912AC

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	- 11.75	-12	- 12.25	V
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, } P_0 \le 15 \text{ W}$ $V_1 = -15.5 \text{ to } -27 \text{ V}$	-11.5	-12	-12.5	V
ΔV _O ⁽¹⁾	Line regulation	$V_I = -14.5 \text{ to } -30 \text{ V}, T_J = 25^{\circ}\text{C}$			240	m)/
Δνοιν	Line regulation	V _I = -16 to -22 V, T _J = 25°C			120	mV
ΔV _O ⁽¹⁾	Load regulation	$I_0 = 5 \text{ mA to } 1.5 \text{ A}, T_J = 25^{\circ}\text{C}$			240	m\/
Δνοιν	Load regulation	$I_0 = 250 \text{ to } 750 \text{ mA}, T_J = 25^{\circ}\text{C}$			120	mV
ld	Quiescent current	T _J = 25°C			3	mA
A.I.	Quiescent current	I _O = 5 mA to 1 A			0.5	A
ΔI _d	change	V _I = -15 to -30 V			1	mA
ΔV _O /ΔΤ	Output voltage drift	I _O = 5 mA	10	-0.8		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		200		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
V _d	Dropout voltage	$I_{O} = 1 \text{ A}, T_{J} = 25^{\circ}\text{C}, \Delta VO = 100 \text{ mV}$		1.1		V
Isc	Short circuit current			1.0		Α
I _{scp}	Short circuit peak current	T _J = 25°C, V _I = -10 V		1.8		Α

Notes

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -19 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 8: Electrical characteristics of L7912C

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	- 11.5	-12	- 12.5	٧
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, Po} \le 15 \text{ W}$ V _I = -15.5 to -27 V	- 11.4	-12	- 12.6	٧
A) / (1)	Line regulation	$V_I = -14.5 \text{ to } -30 \text{ V}, T_J = 25^{\circ}\text{C}$			240	mV
$\Delta V_0^{(1)}$		$V_I = -16 \text{ to } -22 \text{ V}, T_J = 25^{\circ}\text{C}$			120	IIIV
ΔV _O ⁽¹⁾	Load regulation	$I_0 = 5 \text{ mA to } 1.5 \text{ A}, T_J = 25^{\circ}\text{C}$			240	mV
Δνοί"		I_{O} = 250 to 750 mA, T_{J} = 25°C			120	IIIV
Id	Quiescent current	T _J = 25°C			3	mA



⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

Electrical characteristics L79

Symbol	Parameter	Test conditions		Тур.	Max.	Unit
ΔI_{d}	Quiescent current	I _O = 5 mA to 1 A			0.5	mA
Δld	change	V _I = -15 to -30 V			1	IIIA
ΔV _O /ΔΤ	Output voltage drift	I _O = 5 mA		-0.8		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		200		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120Hz	54	60		dB
V _d	Dropout voltage	$I_0 = 1 \text{ A}, T_J = 25^{\circ}\text{C}, \Delta V_0 = 100 \text{ mV}$		1.1		V
I _{sc}	Short circuit current			1.0		Α

Notes:

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -23 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 9: Electrical characteristics of L7915AC

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	- 14.7	-15	- 15.3	V
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, } P_0 \le 15 \text{ W}$ V _I = -18.5 to -30 V	- 14.4	-15	- 15.6	V
ΔV _O ⁽¹⁾	Line regulation	$V_I = -17.5 \text{ to } -30 \text{ V}, T_J = 25^{\circ}\text{C}$			300	mV
Δνοι	Line regulation	V _I = -20 to -26 V, TJ = 25°C			150	IIIV
A \ / - (1)		Io = 5 mA to 1.5 A, T _J = 25°C			300	m)/
$\Delta V_0^{(1)}$	Load regulation	$I_{O} = 250 \text{ to } 750 \text{ mA}, T_{J} = 25^{\circ}\text{C}$			150	mV
ld	Quiescent current	TJ = 25°C			3	mA
	Quiescent current change	I _O = 5 mA to 1 A			0.5	mA
ΔI _d		V _I = -18.5 to -30 V			1	
ΔV _O /ΔΤ	Output voltage drift	IO = 5 mA		-0.9		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		250		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
V _d	Dropout voltage	IO = 1 A, TJ = 25°C, □VO = 100 mV		1.1		٧
I _{sc}	Short circuit current			0.7		Α
I _{scp}	Short circuit peak current	T _J = 25°C, V _I = -10 V		1.8		А

Notes:

12/27 DocID2149 Rev 23



⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

L79 Electrical characteristics

Refer to the test circuits, T_J = 0 to 125 °C, V_I = -23 V, I_O = 500 mA, C_I = 2.2 μF , C_O = 1 μF unless otherwise specified.

Table 10: Electrical characteristics of L7915C

Symbol	Parameter	Test conditions	Min.	Тур.	Max.	Unit
Vo	Output voltage	T _J = 25°C	- 14.4	-15	- 15.6	V
Vo	Output voltage	$I_0 = -5 \text{ mA to } -1 \text{ A, } P_0 \le 15 \text{ W}$ V _I = -18.5 to -30 V	- 14.3	-15	- 15.7	V
A\/_(1)	Line regulation	$V_I = -17.5 \text{ to } -30 \text{ V}, T_J = 25^{\circ}\text{C}$			300	m\/
$\Delta V_{O}^{(1)}$	Line regulation	V _I = -20 to -26 V, T _J = 25°C			150	mV
A)/ (1)	Load regulation	I _O = 5 mA to 1.5 A, T _J = 25°C			300	\/
$\Delta V_0^{(1)}$	Load regulation	I _O = 250 to 750 mA, T _J = 25°C			150	mV
ld	Quiescent current	T _J = 25°C			3	mA
Δla	Quiescent current change	Io = 5 mA to 1 A			0.5	A
Δld		V _I = -18.5 to -30 V	9		1	mA
ΔV _O /ΔΤ	Output voltage drift	Io = 5 mA		-0.9		mV/°C
eN	Output noise voltage	B = 10 Hz to 100 kHz, T _J = 25°C		250		μV
SVR	Supply voltage rejection	ΔV _I = 10 V, f = 120 Hz	54	60		dB
Vd	Dropout voltage	$I_0 = 1 \text{ A}, T_J = 25^{\circ}\text{C}, \Delta V_0 = 100 \text{ mV}$		1.1		V
I _{sc}	Short circuit current			0.7		Α

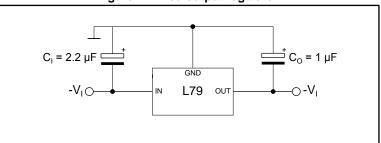
Notes:



⁽¹⁾Load and line regulation are specified at constant junction temperature. Changes in VO due to heating effects must be taken into account separately. Pulse testing with low duty cycle is used.

6 Application information

Figure 4: Fixed output regulator





 $C_{\rm l}$ is required for stability. For value given, capacitor must be solid tantalum. If aluminium electrolytic are used, at least ten times value should be selected. $C_{\rm O}$ is required if regulator is located an appreciable distance from power supply filter. To improve transient response. If large capacitors are used, a high current diode from input to output (1N4001 or similar) should be introduced to protect the device from momentary input short circuit.

Figure 5: Split power supply (±15 V - 1 A)

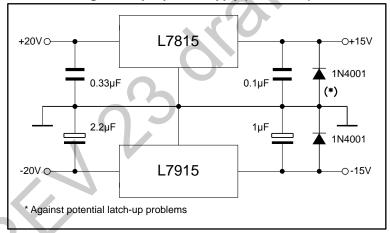
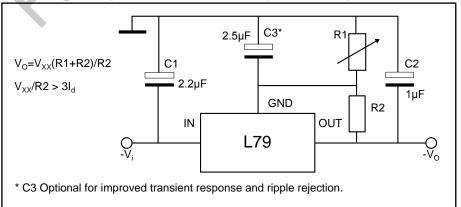


Figure 6: Circuit for increasing output voltage



577

0.2Ω 2N3055 -10V Q2 IN L7905 OUT L7905 1μF

Figure 7: High current negative regulator (-5 V / 4 A with 5 A current limiting)



57/

DocID2149 Rev 23

Package information L79

7 Package information

In order to meet environmental requirements, ST offers these devices in different grades of ECOPACK® packages, depending on their level of environmental compliance. ECOPACK® specifications, grade definitions and product status are available at: www.st.com.

ECOPACK® is an ST trademark.

7.1 TO-220 (single gauge) package information

120 30 J1 Gate Note 9-10 b (x3) e1 8174627 Rev 6

Figure 8: TO-220 (single gauge) package outline

L79 Package information

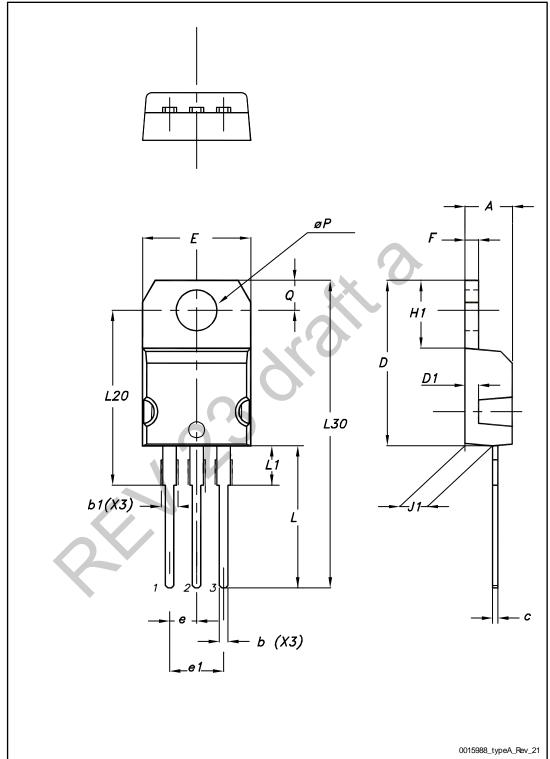
Table 11: TO-220 (single gauge) package mechanical data

D	mm					
Dim.	Min.	Тур.	Max.			
A	4.40		4.60			
b	0.61		0.88			
b1	1.14		1.70			
С	0.48		0.70			
D	15.25		15.75			
E	10.00		10.40			
е	2.40		2.70			
e1	4.95		5.15			
F	0.51		0.60			
H1	6.20		6.60			
J1	2.40		2.72			
L	13.00	'C	14.00			
L1	3.50	\$	3.93			
L20		16.40				
L30		28.90				
ФР	3.75		3.85			
Q	2.65		2.95			

Package information L79

7.2 TO-220 (dual gauge) package information

Figure 9: TO-220 type A package outline



577

L79 Package information

Table 12: TO-220 type A package mechanical data

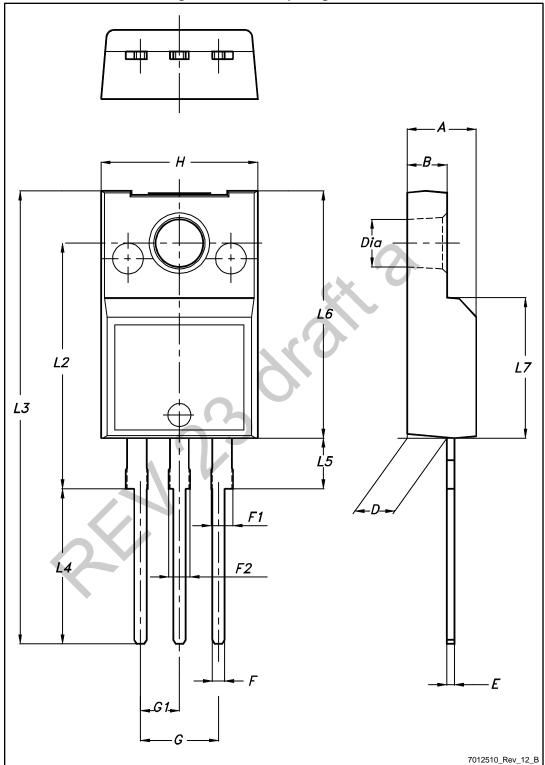
mm					
Dim.		mm			
	Min.	Тур.	Max.		
Α	4.40		4.60		
b	0.61		0.88		
b1	1.14		1.55		
С	0.48		0.70		
D	15.25		15.75		
D1		1.27			
Е	10.00		10.40		
е	2.40		2.70		
e1	4.95		5.15		
F	1.23		1.32		
H1	6.20		6.60		
J1	2.40		2.72		
L	13.00	CX	14.00		
L1	3.50		3.93		
L20		16.40			
L30		28.90			
øΡ	3.75		3.85		
Q	2.65	O '	2.95		



Package information L79

7.3 TO-220FP package information

Figure 10: TO-220FP package outline



577

L79 Package information

Table 13: TO-220FP package mechanical data

Dim.	mm			
Dim.	Min.	Тур.	Max.	
А	4.4		4.6	
В	2.5		2.7	
D	2.5		2.75	
Е	0.45		0.7	
F	0.75		1	
F1	1.15		1.70	
F2	1.15		1.70	
G	4.95		5.2	
G1	2.4		2.7	
Н	10		10.4	
L2		16		
L3	28.6		30.6	
L4	9.8	CX	10.6	
L5	2.9		3.6	
L6	15.9		16.4	
L7	9	1	9.3	
Dia	3		3.2	



Package information L79

7.4 D²PAK (TO-263) type A package information

Figure 11: D²PAK (TO-263) type A package outline

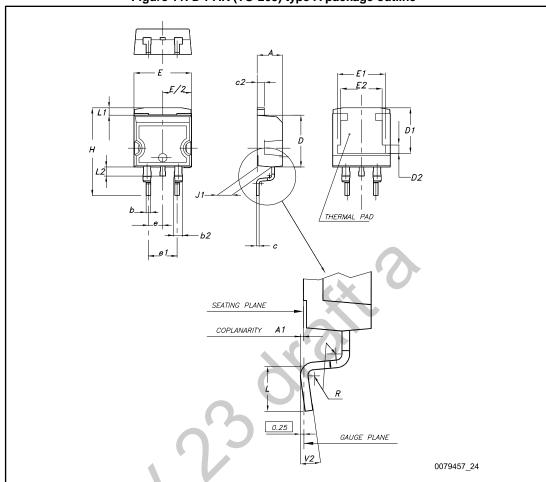


Table 14: D²PAK (TO-263) type A package mechanical data

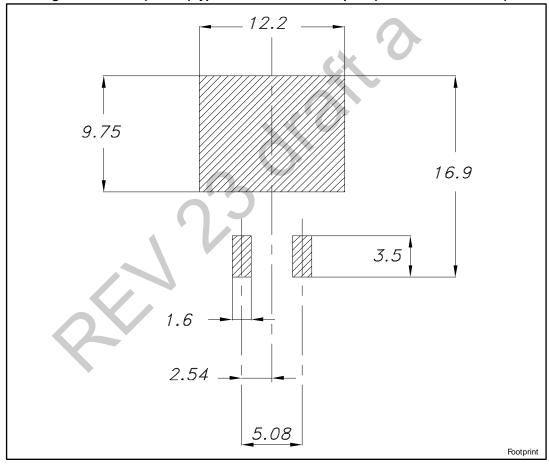
Dim.		mm	
Dilli.	Min.	Тур.	Max.
A	4.40		4.60
A1	0.03		0.23
b	0.70		0.93
b2	1.14		1.70
С	0.45		0.60
c2	1.23		1.36
D	8.95		9.35
D1	7.50	7.75	8.00
D2	1.10	1.30	1.50
Е	10.00		10.40
E1	8.50	8.70	8.90
E2	6.85	7.05	7.25

22/27 DocID2149 Rev 23

L79 Package information

Dim.	mm				
Dilli.	Min.	Тур.	Max.		
е		2.54			
e1	4.88		5.28		
Н	15.00		15.85		
J1	2.49		2.69		
L	2.29		2.79		
L1	1.27		1.40		
L2	1.30		1.75		
R		0.40			
V2	0°		8°		

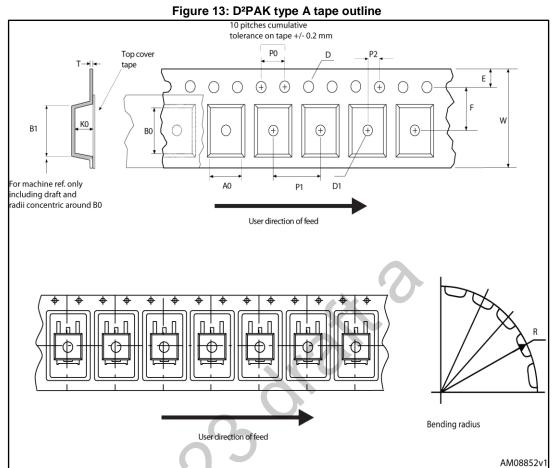
Figure 12: D²PAK (TO-263) type A recommended footprint (dimensions are in mm)





L79 Package information

D²PAK type A packing information 7.5





L79 Package information

A 40mm min. access hole at slot location

Tape slot in core for tape start 2.5mm min.width

AM06038v1

Figure 14: D²PAK type A reel outline

Table 15: D²PAK type A tape and reel mechanical data

	Таре	71		Reel	
Dim.	mm		Dim	mm	
Dilli.	Min.	Max.	Dim.	Min.	Max.
A0	10.5	10.7	А		330
B0	15.7	15.9	В	1.5	
D	1.5	1.6	С	12.8	13.2
D1	1.59	1.61	D	20.2	
E	1.65	1.85	G	24.4	26.4
F	11.4	11.6	N	100	
K0	4.8	5.0	Т		30.4
P0	3.9	4.1			
P1	11.9	12.1	Base quantity		1000
P2	1.9	2.1	Bulk quantity		1000
R	50				
Т	0.25	0.35			
W	23.7	24.3			

Revision history L79

8 Revision history

Table 16: Document revision history

Date Revision		Changes		
22-Jun-2004	9	Order codes updated Table 3.		
31-Aug-2005	10	Add new order codes (TO-220 E Type) on Table 3.		
19-Jan-2007	11	D²PAK mechanical data updated and add footprint data.		
06-Jun-2007	12	Order codes updated.		
25-Oct-2007	13	Modified: Figure 3, Figure 4, Figure 6 and Figure 7.		
05-Dec-2007	14	Modified: Table 1.		
18-Feb-2008	15	Modified: Table 1 on page 1.		
15-Jul-2008	16	Modified: Table 1 on page 1.		
19-Jan-2010	17	Modified: Table 11 on page 14, added: Figure 8 on page 16, Figure 9 on page 17, Figure 10 and Figure 11 on page 18.		
26-May-2010	18	Modified: VI parameter Table 2 on page 5.		
12-Nov-2010	19	Modified: R _{thJC} value for TO-220 <i>Table 3 on page 5.</i>		
18-Nov-2011	20	Added: order codes L7905CV-DG, L7912CV-DG and L7915CV-DG Table 1 on page 1.		
15-May-2012	21	Added: order codes L7908CV-DG Table 1 on page 1.		
04-Jun-2014	22	Part numbers L79xxC and L79xxAC changed to L79. Updated the features and the description in cover page. Updated Table 1: Device summary, Section 3: Maximum ratings, Section 4: Test circuit, Section 5: Electrical characteristics, Section 6: Application information, Section 7: Package mechanical data. Added Section 8: Packaging mechanical data. Minor text changes.		
27-Sep-2017	23	In Table 4: "Electrical characteristics of L7905AC": - updated I _{SC} and I _{SCP} Typ. Values In Table 5: "Electrical characteristics of L7905C": - updated I _{SC} Typ. Values In Table 7: "Electrical characteristics of L7912AC": - updated I _{SC} Typ. Value - updated I _{SCP} Test conditions and Typ. Value In Table_8Electrical_characteristics_of_L - updated I _{SC} Typ. Value In Table 9: "Electrical characteristics of L7915AC": - updated I _{SC} Typ. Value - updated I _{SCP} Test conditions and Typ. Value In Table 10: "Electrical characteristics of L7915C" - updated I _{SCP} Typ. Value Updated Section 7: "Package information"		

26/27 DocID2149 Rev 23



IMPORTANT NOTICE - PLEASE READ CAREFULLY

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2017 STMicroelectronics - All rights reserved

