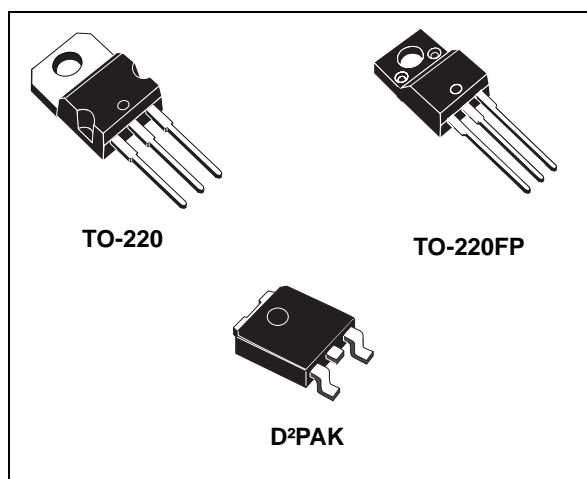


## Negative voltage regulators

Datasheet - production data



### Description

The L79 series of three-terminal negative regulators is available in TO-220, TO-220FP and D<sup>2</sup>PAK 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.

### Features

- Output current up to 1.5 A
- Output voltages of - 5; - 8; - 12; - 15 V
- Thermal overload protection
- Short circuit protection
- Output transition SOA protection
- Output tolerance 2% (AC version) or 4% (C version) at 25°C

**Table 1. Device summary**

Order codes				Output voltages
TO-220 (single gauge)	TO-220 (dual gauge)	D <sup>2</sup> PAK	TO-220FP	
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

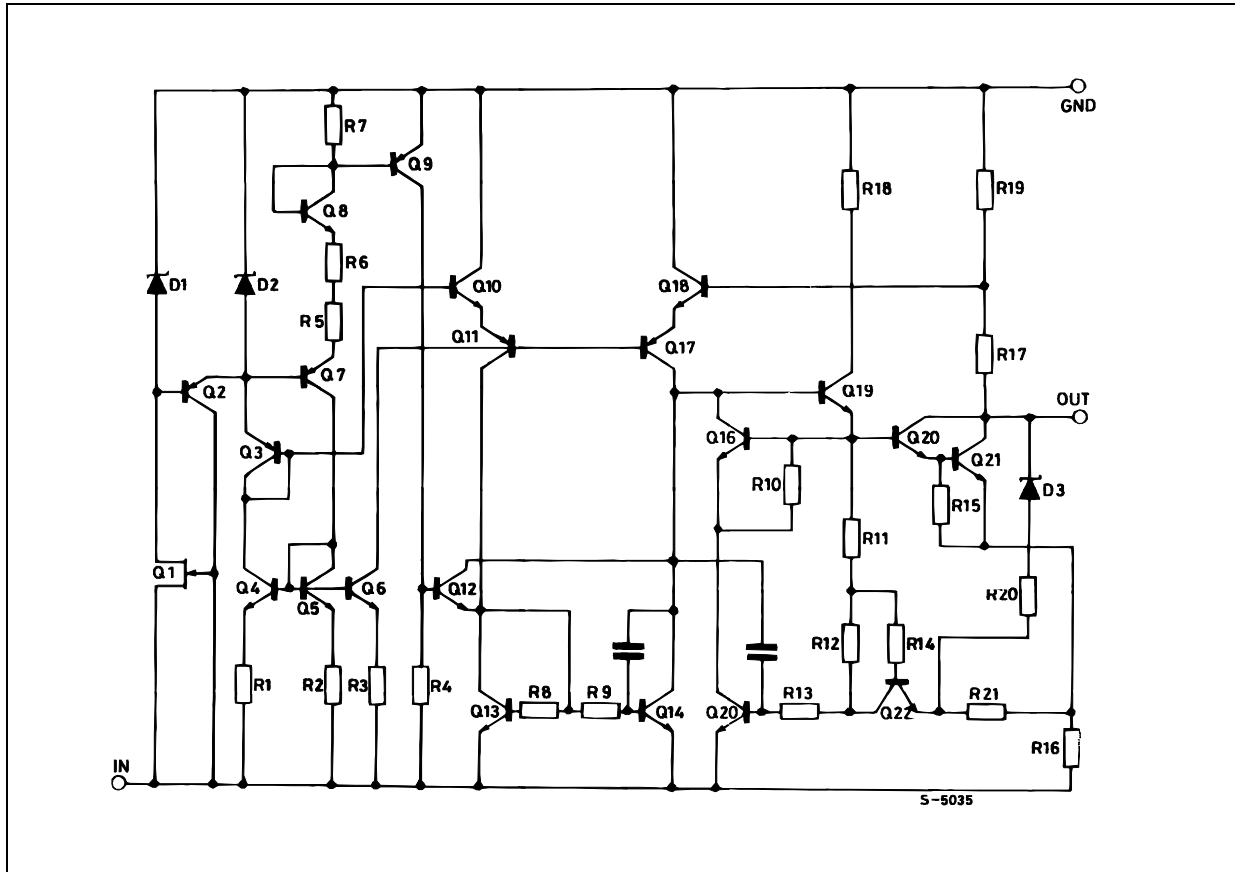
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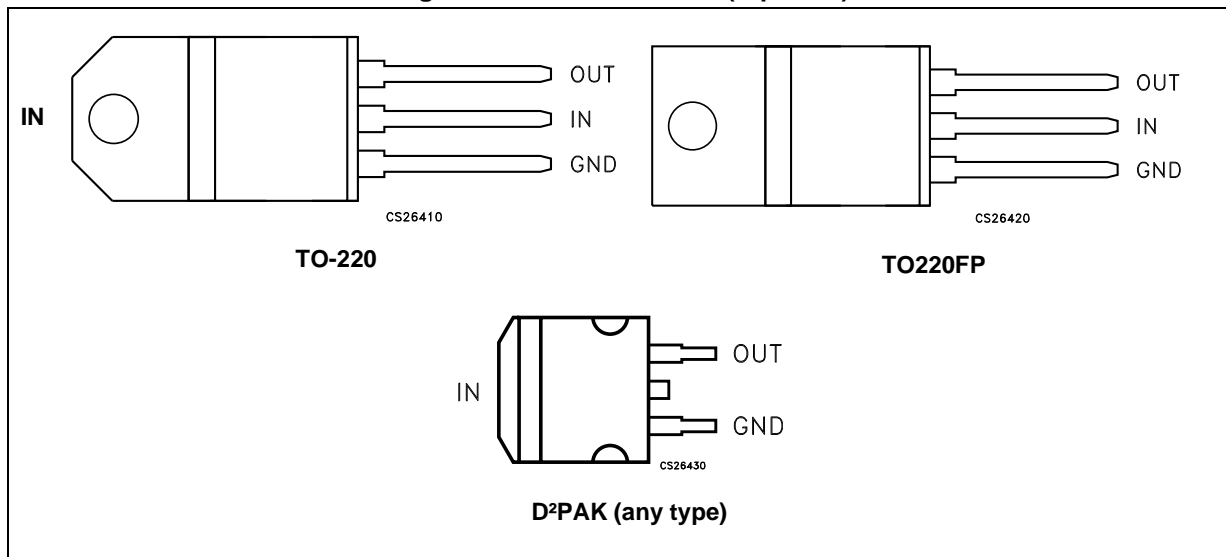
# 1 Diagram

Figure 1. Schematic diagram



## 2 Pin configuration

Figure 2. Pin connections (top view)



### 3 Maximum ratings

**Table 2. Absolute maximum ratings**

Symbol	Parameter		Value	Unit
$V_I$	DC input voltage		-35	V
$I_O$	Output current		Internally limited	
$P_D$	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
		for L79xxAC	0 to 125	

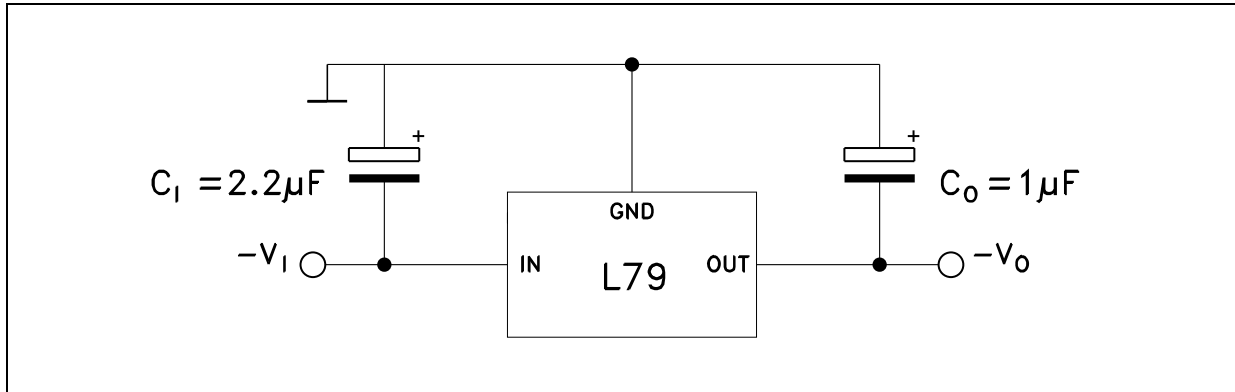
*Note: Absolute maximum ratings are those values beyond which damage to the device may occur. Functional operation under these condition is not implied.*

**Table 3. Thermal data**

Symbol	Parameter	D <sup>2</sup> PAK	TO-220	TO-220FP	Unit
$R_{thJC}$	Thermal resistance junction-case	3	5	5	°C/W
$R_{thJA}$	Thermal resistance junction-ambient	62.5	50	60	°C/W

## 4 Test circuit

Figure 3. Test circuit



## 5 Electrical characteristics

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

**Table 4. Electrical characteristics of L7905AC**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-4.9	-5	-5.1	V
$V_O$	Output voltage	$I_O = -5$ mA to $-1$ A, $P_O \leq 15$ W $V_I = -8$ to $-20$ V	-4.8	-5	-5.2	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -7$ to $-25$ V, $T_J = 25^\circ\text{C}$			100	mV
		$V_I = -8$ to $-12$ V, $T_J = 25^\circ\text{C}$			50	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5$ mA to $1.5$ A, $T_J = 25^\circ\text{C}$			100	mV
		$I_O = 250$ to $750$ mA, $T_J = 25^\circ\text{C}$			50	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5$ mA to $1$ A			0.5	mA
		$V_I = -8$ to $-25$ V			1.3	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5$ mA		-0.4		mV/°C
eN	Output noise voltage	$B = 10$ Hz to $100$ kHz, $T_J = 25^\circ\text{C}$		100		$\mu$ V
SVR	Supply voltage rejection	$\Delta V_I = 10$ V, $f = 120$ Hz	54	60		dB
$V_d$	Dropout voltage	$I_O = 1$ A, $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100$ mV		1.4		V
$I_{sc}$	Short circuit current			2.1		A
$I_{scp}$	Short circuit peak current	$T_J = 25^\circ\text{C}$		2.5		A

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

Refer to the test circuits,  $T_J = 0$  to  $125\text{ }^\circ\text{C}$ ,  $V_I = -10\text{ V}$ ,  $I_O = 500\text{ mA}$ ,  $C_I = 2.2\text{ }\mu\text{F}$ ,  $C_O = 1\text{ }\mu\text{F}$  unless otherwise specified.

**Table 5. Electrical characteristics of L7905C**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-4.8	-5	-5.2	V
$V_O$	Output voltage	$I_O = -5\text{ mA to } -1\text{ A}$ , $P_O \leq 15\text{ W}$ $V_I = -8\text{ to } -20\text{ V}$	-4.75	-5	-5.25	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -7\text{ to } -25\text{ V}$ , $T_J = 25^\circ\text{C}$			100	mV
		$V_I = -8\text{ to } -12\text{ V}$ , $T_J = 25^\circ\text{C}$			50	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5\text{ mA to } 1.5\text{ A}$ , $T_J = 25^\circ\text{C}$			100	mV
		$I_O = 250\text{ to } 750\text{ mA}$ , $T_J = 25^\circ\text{C}$			50	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5\text{ mA to } 1\text{ A}$			0.5	mA
		$V_I = -8\text{ to } -25\text{ V}$			1.3	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5\text{ mA}$		-0.4		mV/ $^\circ\text{C}$
eN	Output noise voltage	$B = 10\text{ Hz to } 100\text{ kHz}$ , $T_J = 25^\circ\text{C}$		100		$\mu\text{V}$
SVR	Supply voltage rejection	$\Delta V_I = 10\text{ V}$ , $f = 120\text{ Hz}$	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			2.1		A

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



Refer to the test circuits,  $T_J = 0$  to  $125$  °C,  $V_I = -14$  V,  $I_O = 500$  mA,  $C_1 = 2.2$   $\mu$ F,  $C_O = 1$   $\mu$ F unless otherwise specified.

**Table 6. Electrical characteristics of L7908C**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-7.7	-8	-8.3	V
$V_O$	Output voltage	$I_O = -5$ mA to $-1$ A, $P_O \leq 15$ W $V_I = -11.5$ to $-23$ V	-7.6	-8	-8.4	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -10.5$ to $-25$ V, $T_J = 25^\circ\text{C}$			160	mV
		$V_I = -11$ to $-17$ V, $T_J = 25^\circ\text{C}$			80	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5$ mA to $1.5$ A, $T_J = 25^\circ\text{C}$			160	mV
		$I_O = 250$ to $750$ mA, $T_J = 25^\circ\text{C}$			80	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5$ mA to $1$ A			0.5	mA
		$V_I = -11.5$ to $-25$ V			1	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5$ mA		-0.6		mV/°C
eN	Output noise voltage	$B = 10$ Hz to $100$ kHz, $T_J = 25^\circ\text{C}$		175		$\mu$ V
SVR	Supply voltage rejection	$\Delta V_I = 10$ V, $f = 120$ Hz	54	60		dB
$V_d$	Dropout voltage	$I_O = 1$ A, $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100$ mV		1.1		V
$I_{sc}$	Short circuit current			1.5		A

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

Refer to the test circuits,  $T_J = 0$  to  $125\text{ }^\circ\text{C}$ ,  $V_I = -19\text{ V}$ ,  $I_O = 500\text{ mA}$ ,  $C_1 = 2.2\text{ }\mu\text{F}$ ,  $C_O = 1\text{ }\mu\text{F}$  unless otherwise specified.

**Table 7. Electrical characteristics of L7912AC**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-11.75	-12	-12.25	V
$V_O$	Output voltage	$I_O = -5\text{ mA to } -1\text{ A}$ , $P_O \leq 15\text{ W}$ $V_I = -15.5\text{ to } -27\text{ V}$	-11.5	-12	-12.5	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -14.5\text{ to } -30\text{ V}$ , $T_J = 25^\circ\text{C}$			240	mV
		$V_I = -16\text{ to } -22\text{ V}$ , $T_J = 25^\circ\text{C}$			120	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5\text{ mA to } 1.5\text{ A}$ , $T_J = 25^\circ\text{C}$			240	mV
		$I_O = 250\text{ to } 750\text{ mA}$ , $T_J = 25^\circ\text{C}$			120	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5\text{ mA to } 1\text{ A}$			0.5	mA
		$V_I = -15\text{ to } -30\text{ V}$			1	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5\text{ mA}$		-0.8		mV/ $^\circ\text{C}$
eN	Output noise voltage	$B = 10\text{ Hz to } 100\text{ kHz}$ , $T_J = 25^\circ\text{C}$		200		$\mu\text{V}$
SVR	Supply voltage rejection	$\Delta V_I = 10\text{ V}$ , $f = 120\text{ Hz}$	54	60		dB
$V_d$	Dropout voltage	$I_O = 1\text{ A}$ , $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100\text{ mV}$		1.1		V
$I_{sc}$	Short circuit current			1.5		A
$I_{scp}$	Short circuit peak current	$T_J = 25^\circ\text{C}$		2.5		A

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

Refer to the test circuits,  $T_J = 0$  to  $125$  °C,  $V_I = -19$  V,  $I_O = 500$  mA,  $C_1 = 2.2$   $\mu$ F,  $C_O = 1$   $\mu$ F unless otherwise specified.

**Table 8. Electrical characteristics of L7912C**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-11.5	-12	-12.5	V
$V_O$	Output voltage	$I_O = -5$ mA to $-1$ A, $P_O \leq 15$ W $V_I = -15.5$ to $-27$ V	-11.4	-12	-12.6	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -14.5$ to $-30$ V, $T_J = 25^\circ\text{C}$			240	mV
		$V_I = -16$ to $-22$ V, $T_J = 25^\circ\text{C}$			120	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5$ mA to $1.5$ A, $T_J = 25^\circ\text{C}$			240	mV
		$I_O = 250$ to $750$ mA, $T_J = 25^\circ\text{C}$			120	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5$ mA to $1$ A			0.5	mA
		$V_I = -15$ to $-30$ V			1	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5$ mA		-0.8		mV/°C
eN	Output noise voltage	$B = 10$ Hz to $100$ kHz, $T_J = 25^\circ\text{C}$		200		$\mu$ V
SVR	Supply voltage rejection	$\Delta V_I = 10$ V, $f = 120$ Hz	54	60		dB
$V_d$	Dropout voltage	$I_O = 1$ A, $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100$ mV		1.1		V
$I_{sc}$	Short circuit current			1.5		A

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

Refer to the test circuits,  $T_J = 0$  to  $125\text{ }^\circ\text{C}$ ,  $V_I = -23\text{ V}$ ,  $I_O = 500\text{ mA}$ ,  $C_1 = 2.2\text{ }\mu\text{F}$ ,  $C_O = 1\text{ }\mu\text{F}$  unless otherwise specified.

**Table 9. Electrical characteristics of L7915AC**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-14.7	-15	-15.3	V
$V_O$	Output voltage	$I_O = -5\text{ mA to } -1\text{ A}$ , $P_O \leq 15\text{ W}$ $V_I = -18.5\text{ to } -30\text{ V}$	-14.4	-15	-15.6	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -17.5\text{ to } -30\text{ V}$ , $T_J = 25^\circ\text{C}$			300	mV
		$V_I = -20\text{ to } -26\text{ V}$ , $T_J = 25^\circ\text{C}$			150	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5\text{ mA to } 1.5\text{ A}$ , $T_J = 25^\circ\text{C}$			300	mV
		$I_O = 250\text{ to } 750\text{ mA}$ , $T_J = 25^\circ\text{C}$			150	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5\text{ mA to } 1\text{ A}$			0.5	mA
		$V_I = -18.5\text{ to } -30\text{ V}$			1	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5\text{ mA}$		-0.9		mV/ $^\circ\text{C}$
eN	Output noise voltage	$B = 10\text{ Hz to } 100\text{ kHz}$ , $T_J = 25^\circ\text{C}$		250		$\mu\text{V}$
SVR	Supply voltage rejection	$\Delta V_I = 10\text{ V}$ , $f = 120\text{ Hz}$	54	60		dB
$V_d$	Dropout voltage	$I_O = 1\text{ A}$ , $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100\text{ mV}$		1.1		V
$I_{sc}$	Short circuit current			1.3		A
$I_{scp}$	Short circuit peak current	$T_J = 25^\circ\text{C}$		2.5		A

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

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

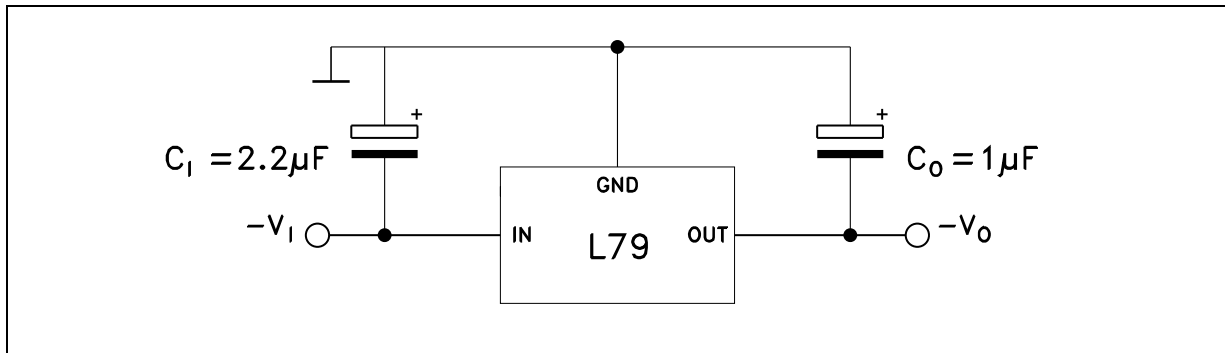
**Table 10. Electrical characteristics of L7915C**

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
$V_O$	Output voltage	$T_J = 25^\circ\text{C}$	-14.4	-15	-15.6	V
$V_O$	Output voltage	$I_O = -5$ mA to $-1$ A, $P_O \leq 15$ W $V_I = -18.5$ to $-30$ V	-14.3	-15	-15.7	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -17.5$ to $-30$ V, $T_J = 25^\circ\text{C}$			300	mV
		$V_I = -20$ to $-26$ V, $T_J = 25^\circ\text{C}$			150	
$\Delta V_O^{(1)}$	Load regulation	$I_O = 5$ mA to $1.5$ A, $T_J = 25^\circ\text{C}$			300	mV
		$I_O = 250$ to $750$ mA, $T_J = 25^\circ\text{C}$			150	
$I_d$	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
$\Delta I_d$	Quiescent current change	$I_O = 5$ mA to $1$ A			0.5	mA
		$V_I = -18.5$ to $-30$ V			1	
$\Delta V_O/\Delta T$	Output voltage drift	$I_O = 5$ mA		-0.9		mV/°C
eN	Output noise voltage	$B = 10$ Hz to $100$ kHz, $T_J = 25^\circ\text{C}$		250		$\mu$ V
SVR	Supply voltage rejection	$\Delta V_I = 10$ V, $f = 120$ Hz	54	60		dB
$V_d$	Dropout voltage	$I_O = 1$ A, $T_J = 25^\circ\text{C}$ , $\Delta V_O = 100$ mV		1.1		V
$I_{sc}$	Short circuit current			1.3		A

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

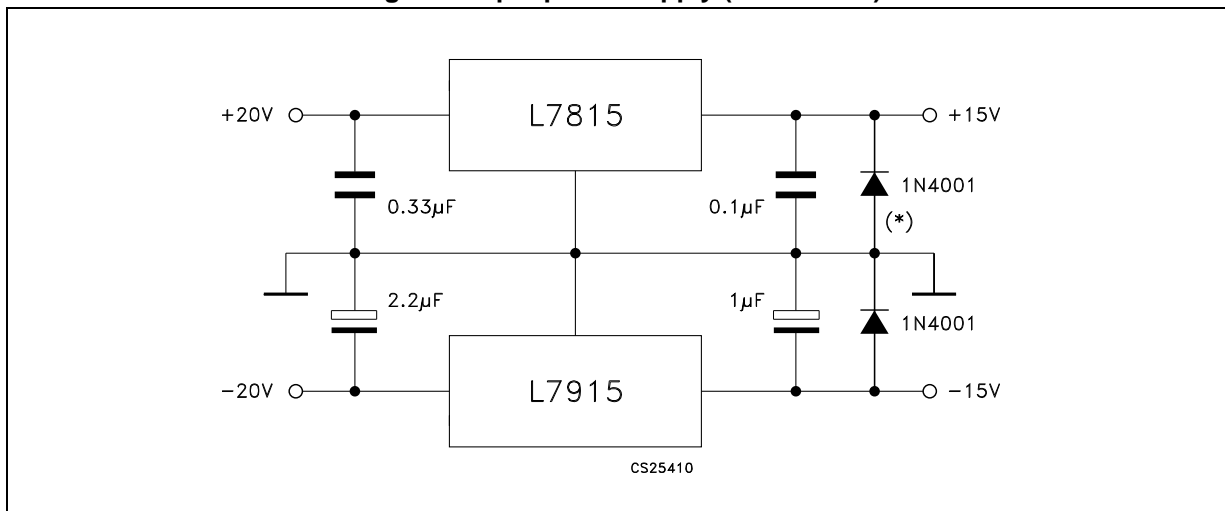
## 6 Application information

Figure 4. Fixed output regulator



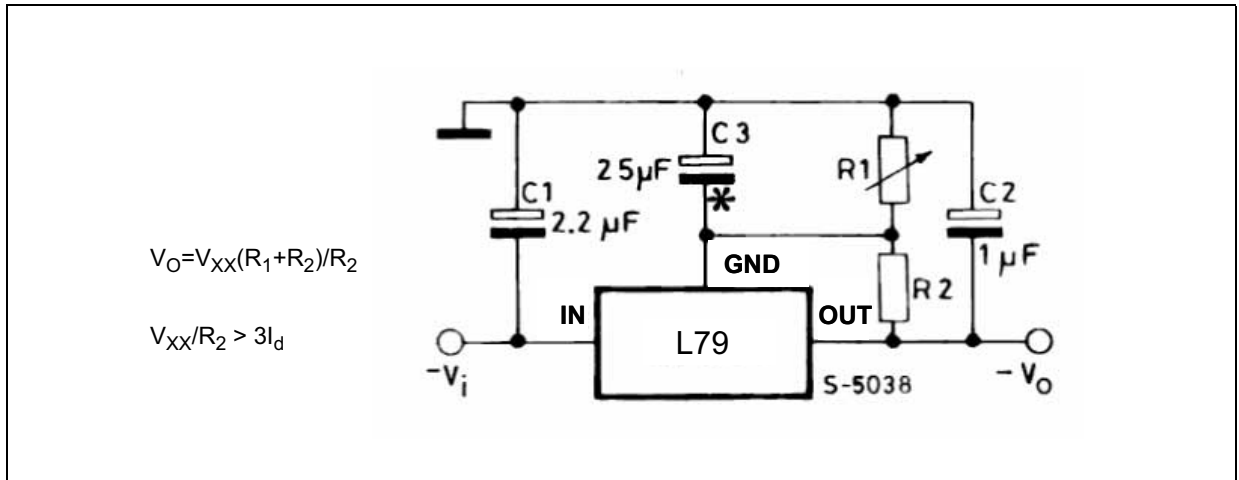
Note:  $C_I$  is required for stability. For value given, capacitor must be solid tantalum. If aluminium electrolytic are used, at least ten times value should be selected.  $C_O$  is required if regulator is located an appreciable distance from power supply filter. To improve transient response. If 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 ( $\pm 15\text{ V} - 1\text{ A}$ )



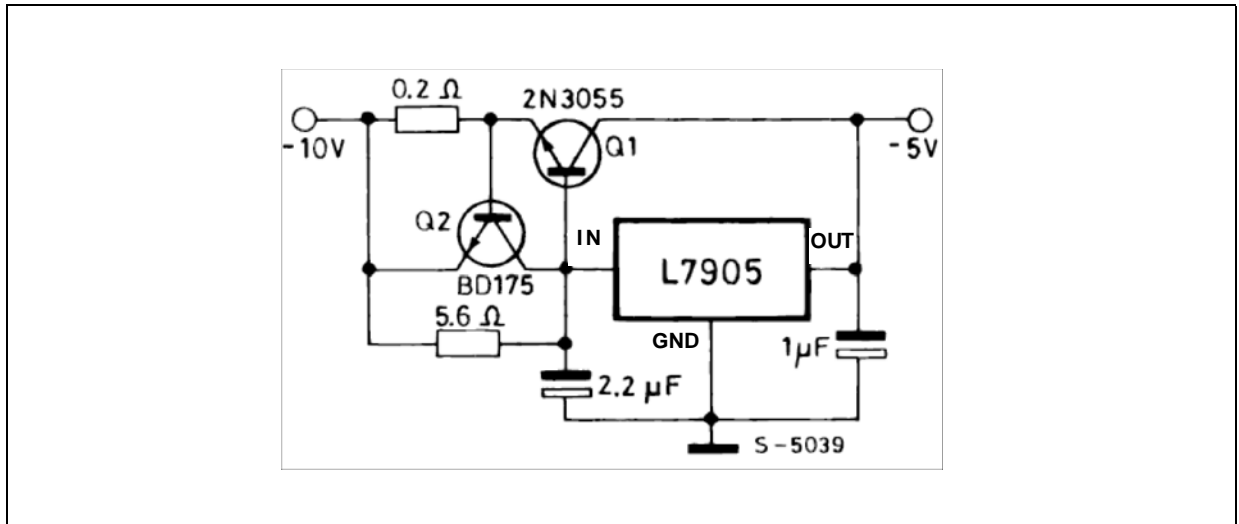
(\*) Against potential latch-up problems.

Figure 6. Circuit for increasing output voltage



C3 Optional for improved transient response and ripple rejection.

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



# 7 Package mechanical data

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](http://www.st.com). ECOPACK® is an ST trademark.

Figure 8. TO-220 (single gauge) drawing

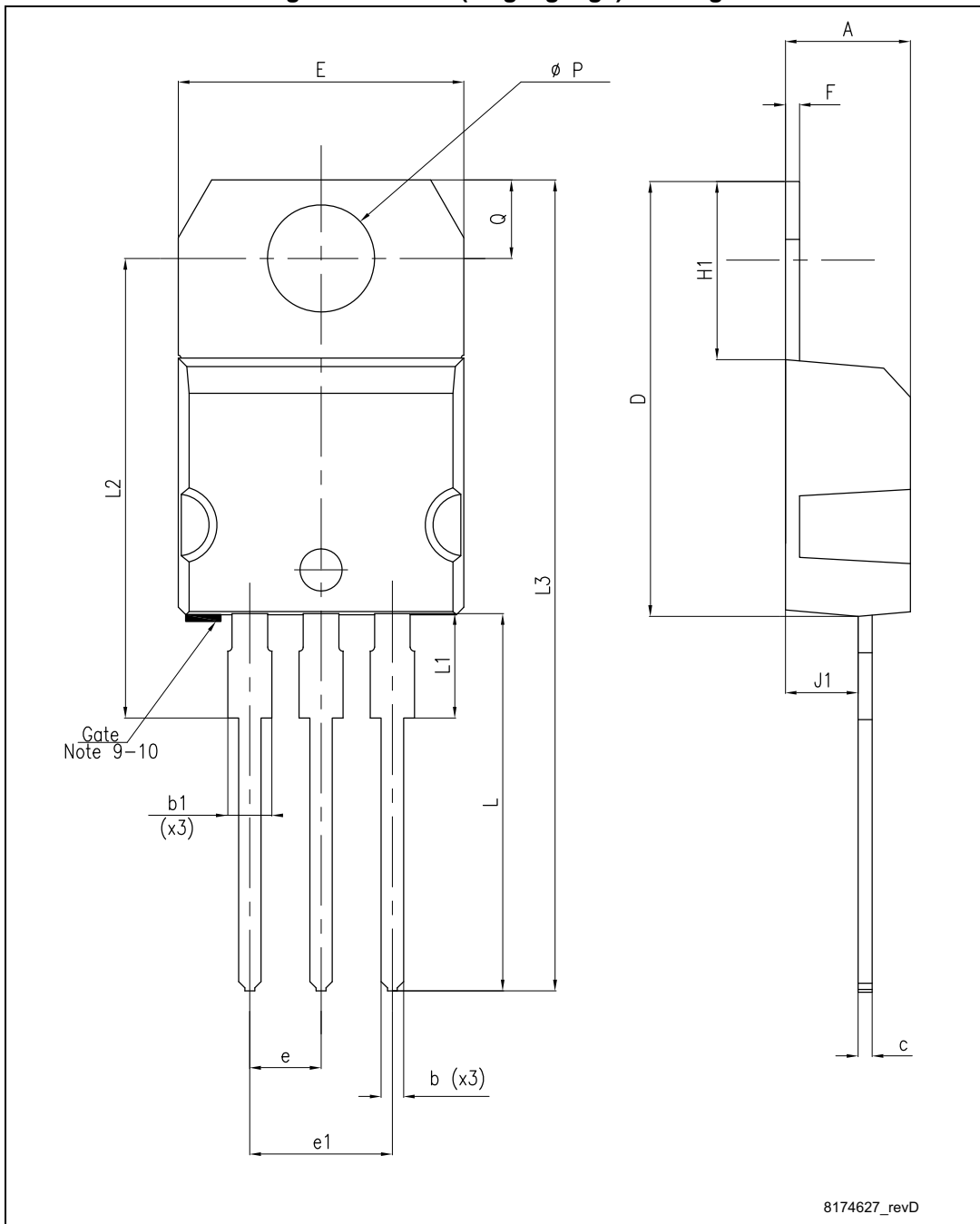




Table 11. TO-220 (single gauge) mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
b	0.61		0.88
b1	1.14		1.70
c	0.48		0.70
D	15.25		15.75
E	10		10.40
e	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		14
L1	3.50		3.93
L20		16.40	
L30		28.90	
ØP	3.75		3.85
Q	2.65		2.95

Figure 9. TO-220 (dual gauge) drawing

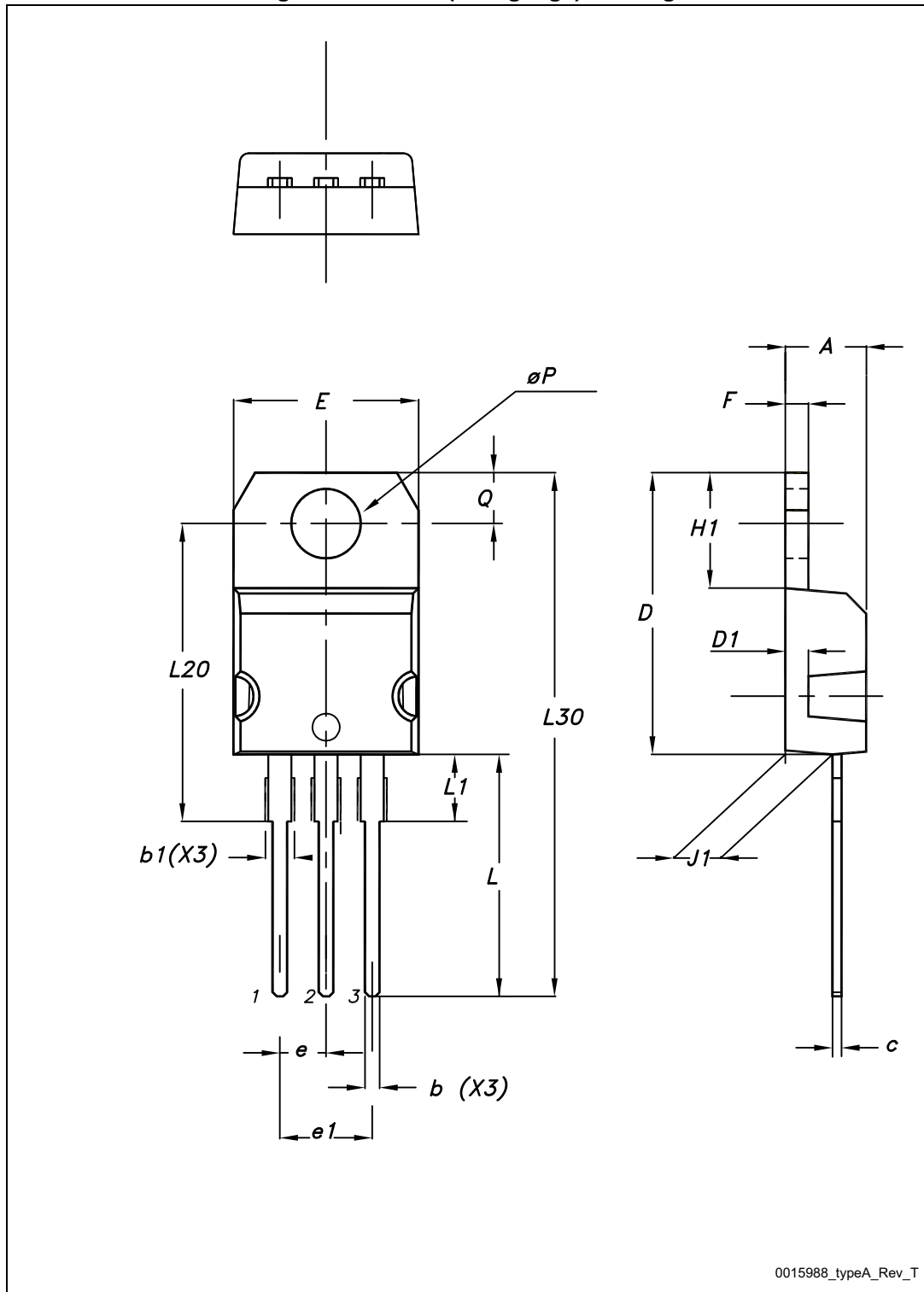


Table 12. TO-220 (dual gauge) mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
b	0.61		0.88
b1	1.14		1.70
c	0.48		0.70
D	15.25		15.75
D1		1.27	
E	10		10.40
e	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		14
L1	3.50		3.93
L20		16.40	
L30		28.90	
ØP	3.75		3.85
Q	2.65		2.95

Figure 10. TO-220FP drawing

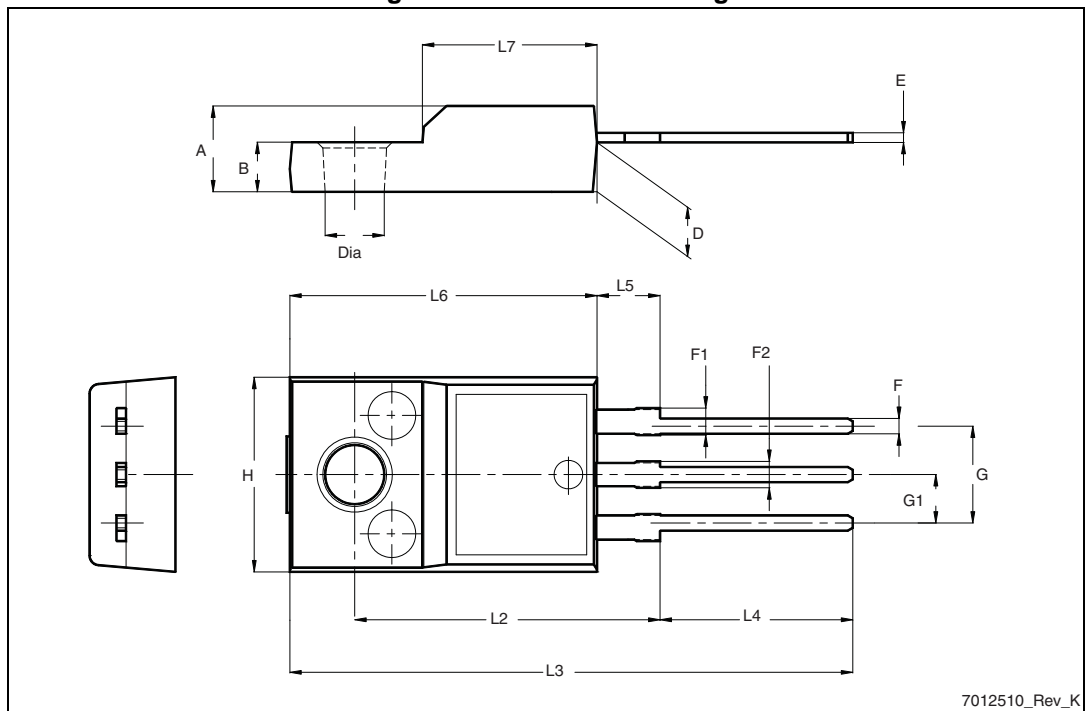
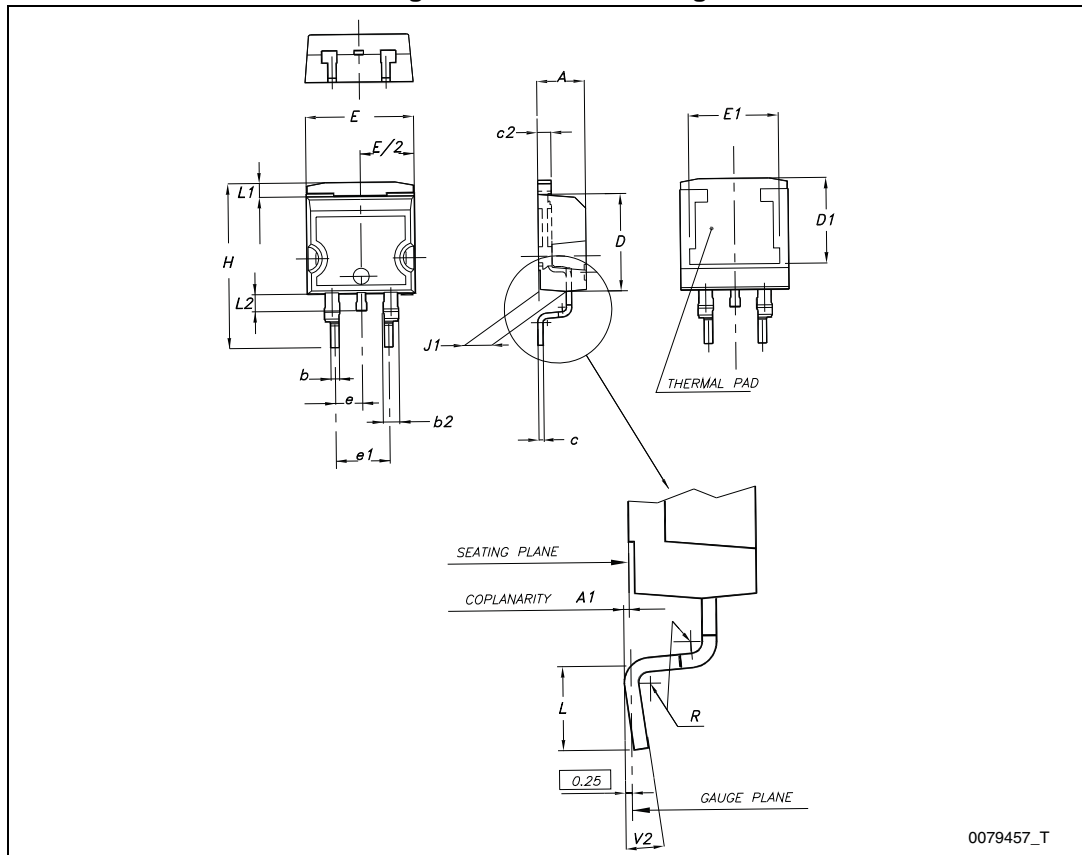


Table 13. TO-220FP mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.4		4.6
B	2.5		2.7
D	2.5		2.75
E	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
H	10		10.4
L2		16	
L3	28.6		30.6
L4	9.8		10.6
L5	2.9		3.6
L6	15.9		16.4
L7	9		9.3
Dia	3		3.2

Figure 11. D<sup>2</sup>PAK drawing

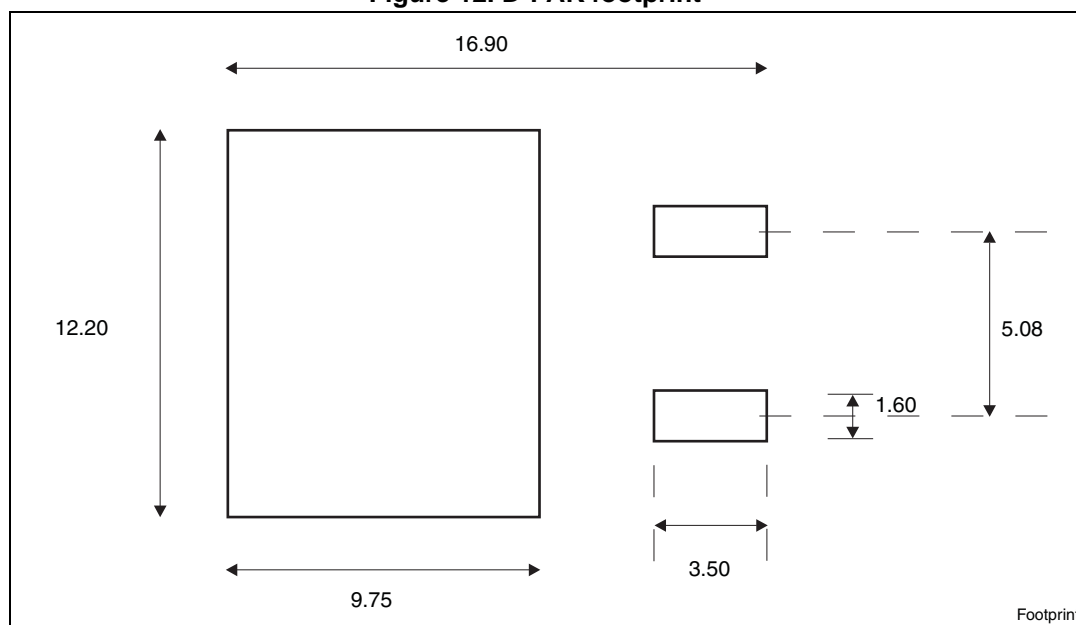


0079457\_T

Table 14. D<sup>2</sup>PAK mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
A1	0.03		0.23
b	0.70		0.93
b2	1.14		1.70
c	0.45		0.60
c2	1.23		1.36
D	8.95		9.35
D1	7.50		
E	10		10.40
E1	8.50		
e		2.54	
e1	4.88		5.28
H	15		15.85
J1	2.49		2.69
L	2.29		2.79
L1	1.27		1.40
L2	1.30		1.75
R		0.4	
V2	0°		8°

Figure 12. D<sup>2</sup>PAK footprint<sup>(a)</sup>



a. All dimensions are in millimeters.



# 8 Packaging mechanical data

Figure 13. Tape

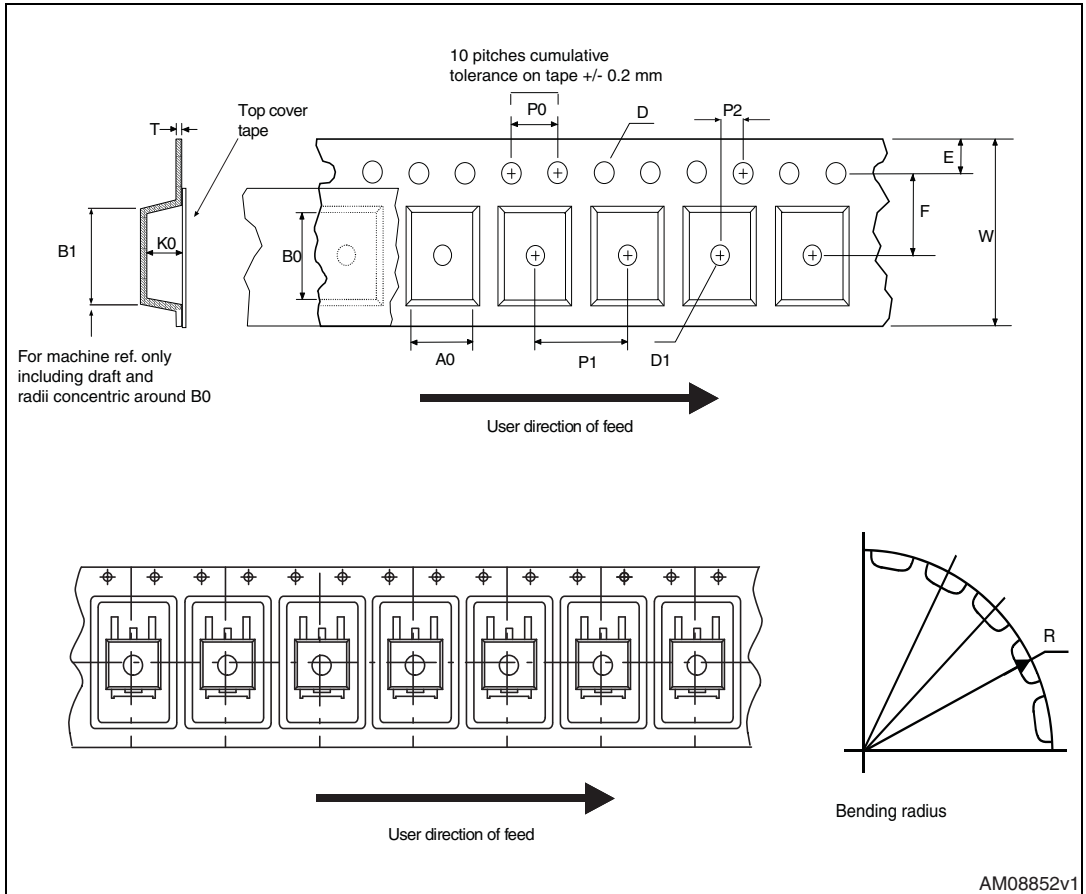


Figure 14. Reel

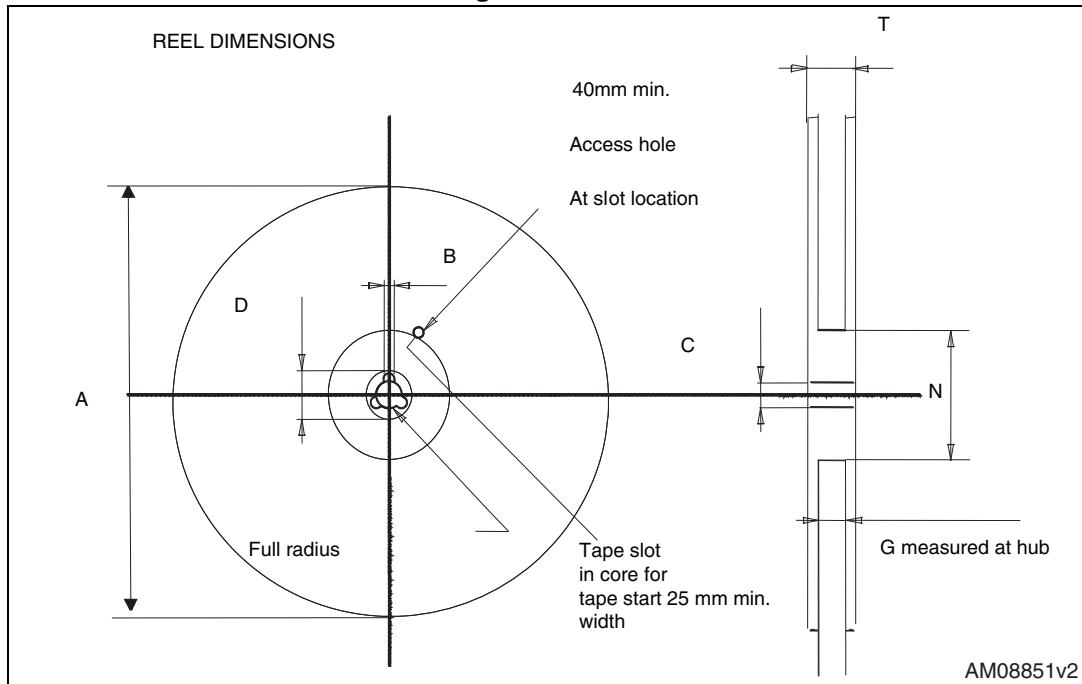


Table 15. D<sup>2</sup>PAK tape and reel mechanical data

Tape			Reel		
Dim.	mm		Dim.	mm	
	Min.	Max.		Min.	Max.
A0	10.5	10.7	A		330
B0	15.7	15.9	B	1.5	
D	1.5	1.6	C	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	T		30.4
P0	3.9	4.1			
P1	11.9	12.1		Base qty	1000
P2	1.9	2.1		Bulk qty	1000
R	50				
T	0.25	0.35			
W	23.7	24.3			

## 9 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	D <sup>2</sup> PAK mechanical data updated and add footprint data.
06-Jun-2007	12	Order codes updated.
25-Oct-2007	13	Modified: <a href="#">Figure 3</a> , <a href="#">Figure 4</a> , <a href="#">Figure 6</a> and <a href="#">Figure 7</a> .
05-Dec-2007	14	Modified: <a href="#">Table 1</a> .
18-Feb-2008	15	Modified: <a href="#">Table 1 on page 1</a> .
15-Jul-2008	16	Modified: <a href="#">Table 1 on page 1</a> .
19-Jan-2010	17	Modified: <a href="#">Table 11 on page 14</a> , added: <a href="#">Figure 8 on page 16</a> , <a href="#">Figure 9 on page 17</a> , <a href="#">Figure 10</a> and <a href="#">Figure 11 on page 18</a> .
26-May-2010	18	Modified: $V_I$ parameter <a href="#">Table 2 on page 5</a> .
12-Nov-2010	19	Modified: $R_{thJC}$ value for TO-220 <a href="#">Table 3 on page 5</a> .
18-Nov-2011	20	Added: order codes L7905CV-DG, L7912CV-DG and L7915CV-DG <a href="#">Table 1 on page 1</a> .
15-May-2012	21	Added: order codes L7908CV-DG <a href="#">Table 1 on page 1</a> .
04-Jun-2014	22	Part numbers L79xxC and L79xxAC changed to L79. Updated the features and the description in cover page. Updated <a href="#">Table 1: Device summary</a> , <a href="#">Section 3: Maximum ratings</a> , <a href="#">Section 4: Test circuit</a> , <a href="#">Section 5: Electrical characteristics</a> , <a href="#">Section 6: Application information</a> , <a href="#">Section 7: Package mechanical data</a> . Added <a href="#">Section 8: Packaging mechanical data</a> . Minor text changes.

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