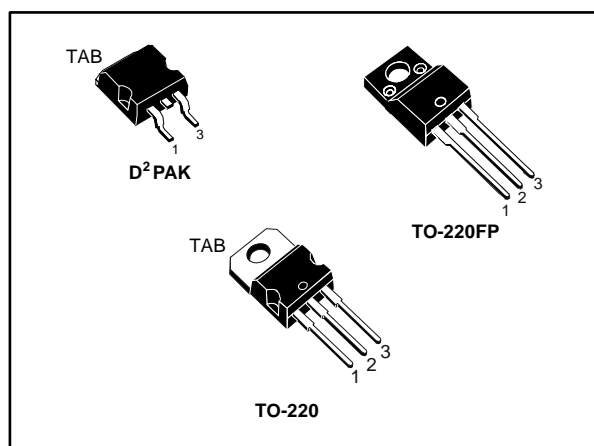


Negative voltage regulators

Datasheet - production data



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.

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

Table 1: Device summary

Order codes				Output voltages
TO-220 (single gauge)	TO-220 (dual gauge)	D ² 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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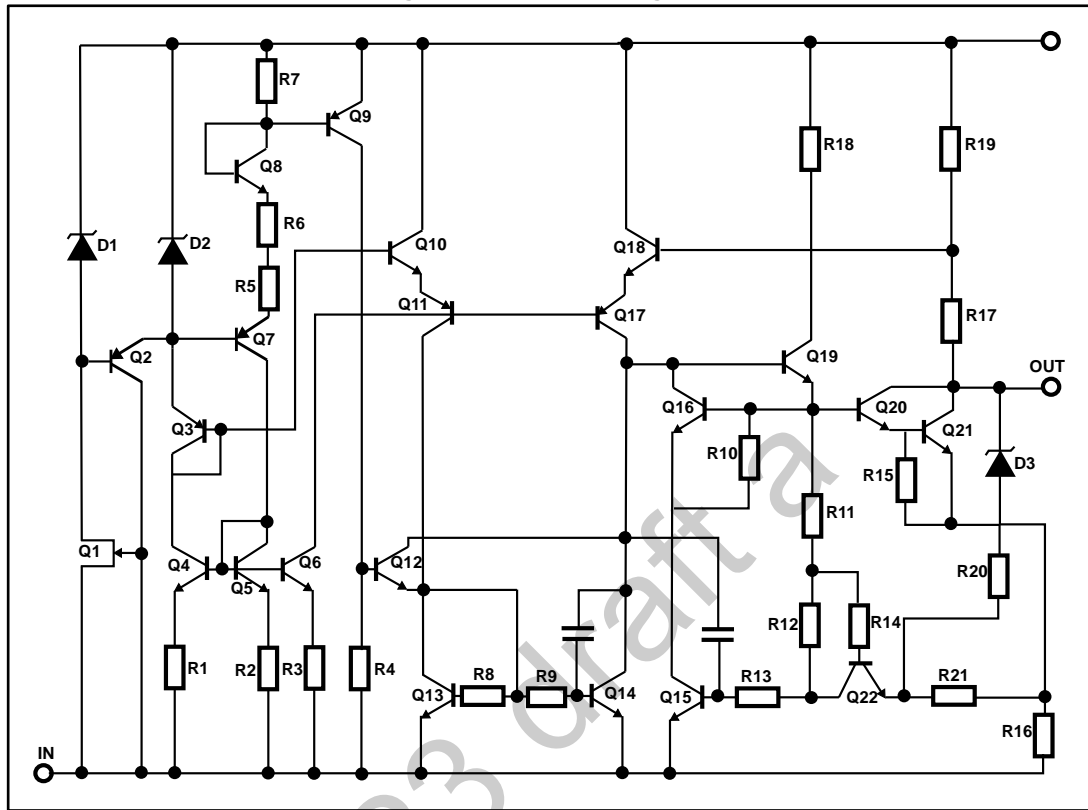
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1 Diagram

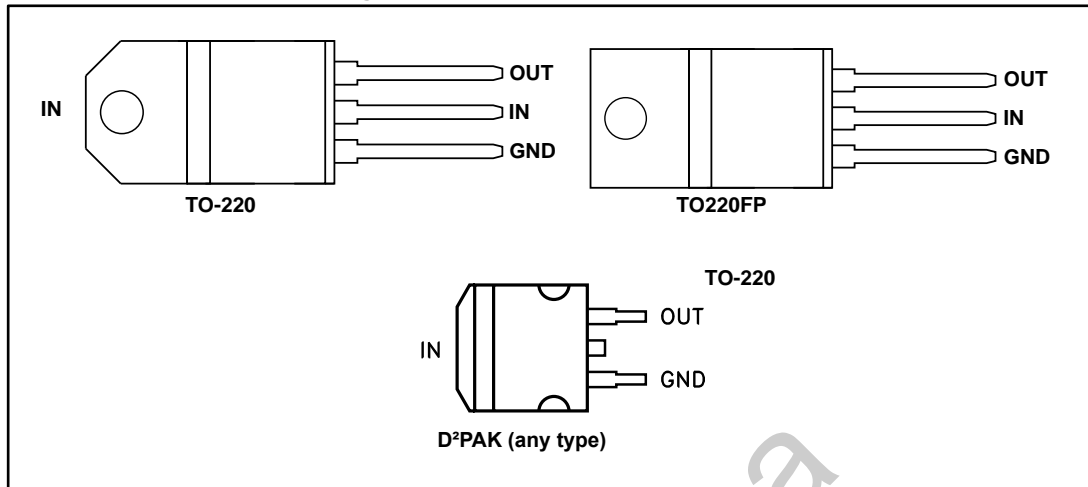
Figure 1: Schematic diagram



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2 Pin configuration

Figure 2: Pin connections (top view)



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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	



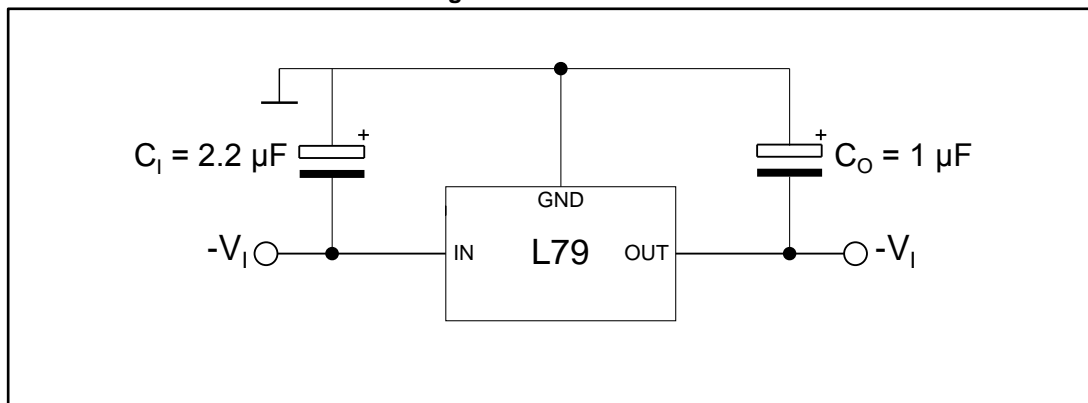
Note: Absolute maximum ratings are those values beyond which damage to the device may occur. Functional operation under these condition is not implied.

Table 3: Thermal data

Symbol	Parameter	D ² 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



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5 Electrical characteristics

Refer to the test circuits, $T_J = 0$ to 125 °C, $V_I = -10$ V, $I_O = 500$ mA, $C_I = 2.2$ μ F, $C_O = 1$ μ 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
ΔI_d	Quiescent current change	$I_O = 5$ mA to 1 A			0.5	mA
		$V_I = -8$ to -25 V			1.3	
$\Delta V_O/\Delta V_T$	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		μ 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
Isc	Short circuit current			1.8		A
Iscp	Short circuit peak current	$T_J = 25^\circ\text{C}$		1.8		A

Notes:

⁽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, $V_I = -10$ V, $I_O = 500$ mA, $C_I = 2.2$ μ F, $C_O = 1$ μ 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	$I_O = -5$ mA to -1 A, $P_O \leq 15$ W $V_I = -8$ to -20 V	-4.75	-5	-5.25	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

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
ΔI_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/°C
eN	Output noise voltage	$B = 10 \text{ Hz to } 100 \text{ kHz}, T_J = 25^\circ\text{C}$		100		μV
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			1.8		A

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.

Refer to the test circuits, $T_J = 0 \text{ to } 125 \text{ }^\circ\text{C}$, $V_I = -14 \text{ V}$, $I_o = 500 \text{ mA}$, $C_I = 2.2 \text{ } \mu\text{F}$, $C_o = 1 \text{ } \mu\text{F}$ unless otherwise specified.

Table 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	$I_o = -5 \text{ mA to } -1 \text{ A}, P_o \leq 15 \text{ W}, V_I = -11.5 \text{ to } -23 \text{ V}$	-7.6	-8	-8.4	V
$\Delta V_o^{(1)}$	Line regulation	$V_I = -10.5 \text{ to } -25 \text{ V}, T_J = 25^\circ\text{C}$			160	mV
		$V_I = -11 \text{ to } -17 \text{ V}, T_J = 25^\circ\text{C}$			80	
$\Delta V_o^{(1)}$	Load regulation	$I_o = 5 \text{ mA to } 1.5 \text{ A}, T_J = 25^\circ\text{C}$			160	mV
		$I_o = 250 \text{ to } 750 \text{ mA}, T_J = 25^\circ\text{C}$			80	
I_d	Quiescent current	$T_J = 25^\circ\text{C}$			3	mA
ΔI_d	Quiescent current change	$I_o = 5 \text{ mA to } 1 \text{ A}$			0.5	mA
		$V_I = -11.5 \text{ to } -25 \text{ V}$			1	
$\Delta V_o/\Delta T$	Output voltage drift	$I_o = 5 \text{ mA}$		-0.6		mV/°C
eN	Output noise voltage	$B = 10 \text{ Hz to } 100 \text{ kHz}, T_J = 25^\circ\text{C}$		175		μV
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

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.

Refer to the test circuits, $T_J = 0$ to 125 °C, $V_I = -19$ V, $I_O = 500$ mA, $C_I = 2.2$ μ F, $C_O = 1$ μ 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	$I_O = -5$ mA to -1 A, $P_O \leq 15$ W $V_I = -15.5$ to -27 V	-11.5	-12	-12.5	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
ΔI_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		μ 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			1.0		A
I_{scp}	Short circuit peak current	$T_J = 25^\circ\text{C}$, $V_I = -10$ V		1.8		A

Notes:

(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, $C_I = 2.2$ μ F, $C_O = 1$ μ 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

Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
ΔI_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/°C
eN	Output noise voltage	$B = 10 \text{ Hz to } 100 \text{ kHz}, T_J = 25^\circ\text{C}$		200		μV
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			1.0		A

Notes:

(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, $T_J = 0 \text{ to } 125^\circ\text{C}$, $V_I = -23 \text{ V}$, $I_o = 500 \text{ mA}$, $C_I = 2.2 \mu\text{F}$, $C_o = 1 \mu\text{F}$ 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
ΔI_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/°C
eN	Output noise voltage	$B = 10 \text{ Hz to } 100 \text{ kHz}, T_J = 25^\circ\text{C}$		250		μV
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			0.7		A
I_{scp}	Short circuit peak current	$T_J = 25^\circ\text{C}, V_I = -10 \text{ V}$		1.8		A

Notes:

(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, $C_I = 2.2$ μ F, $C_O = 1$ μ F unless otherwise specified.

Table 10: Electrical characteristics of L7915C

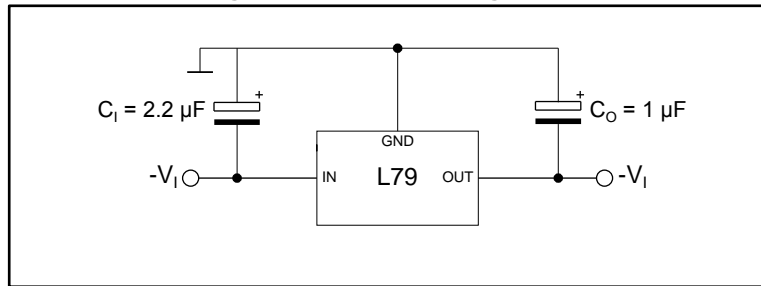
Symbol	Parameter	Test conditions	Min.	Typ.	Max.	Unit
V_O	Output voltage	$T_J = 25^\circ\text{C}$	-14.4	-15	-15.6	V
V_O	Output voltage	$I_O = -5$ mA to -1 A, $P_O \leq 15$ W $V_I = -18.5$ to -30 V	-14.3	-15	-15.7	V
$\Delta V_O^{(1)}$	Line regulation	$V_I = -17.5$ to -30 V, $T_J = 25^\circ\text{C}$			300	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
ΔI_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		μ 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			0.7		A

Notes:

⁽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



C_1 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 ($\pm 15\text{ V} - 1\text{ A}$)

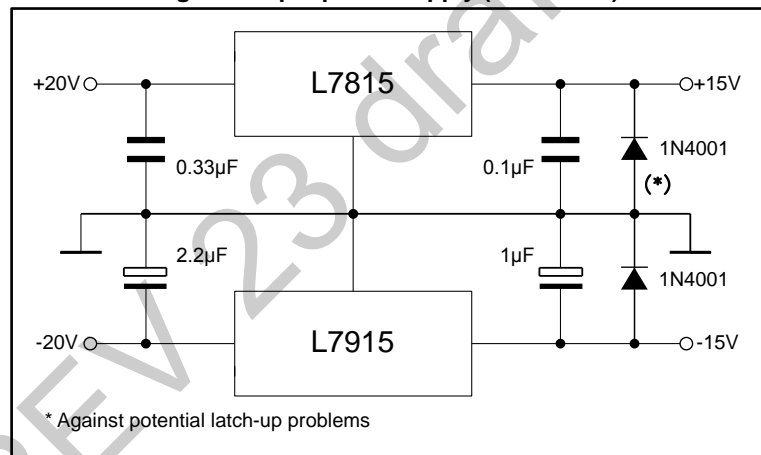


Figure 6: Circuit for increasing output voltage

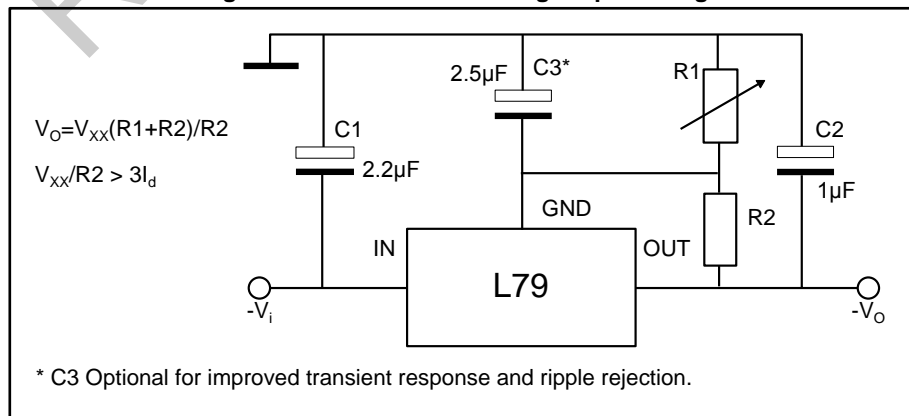
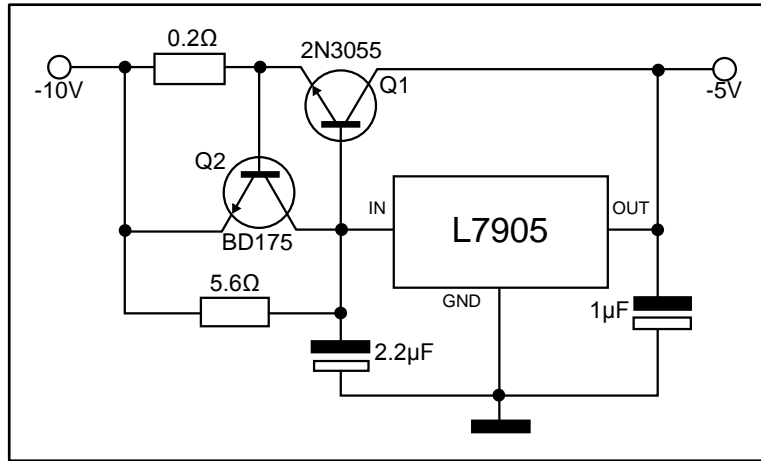


Figure 7: High current negative regulator (-5 V / 4 A with 5 A current limiting)



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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

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

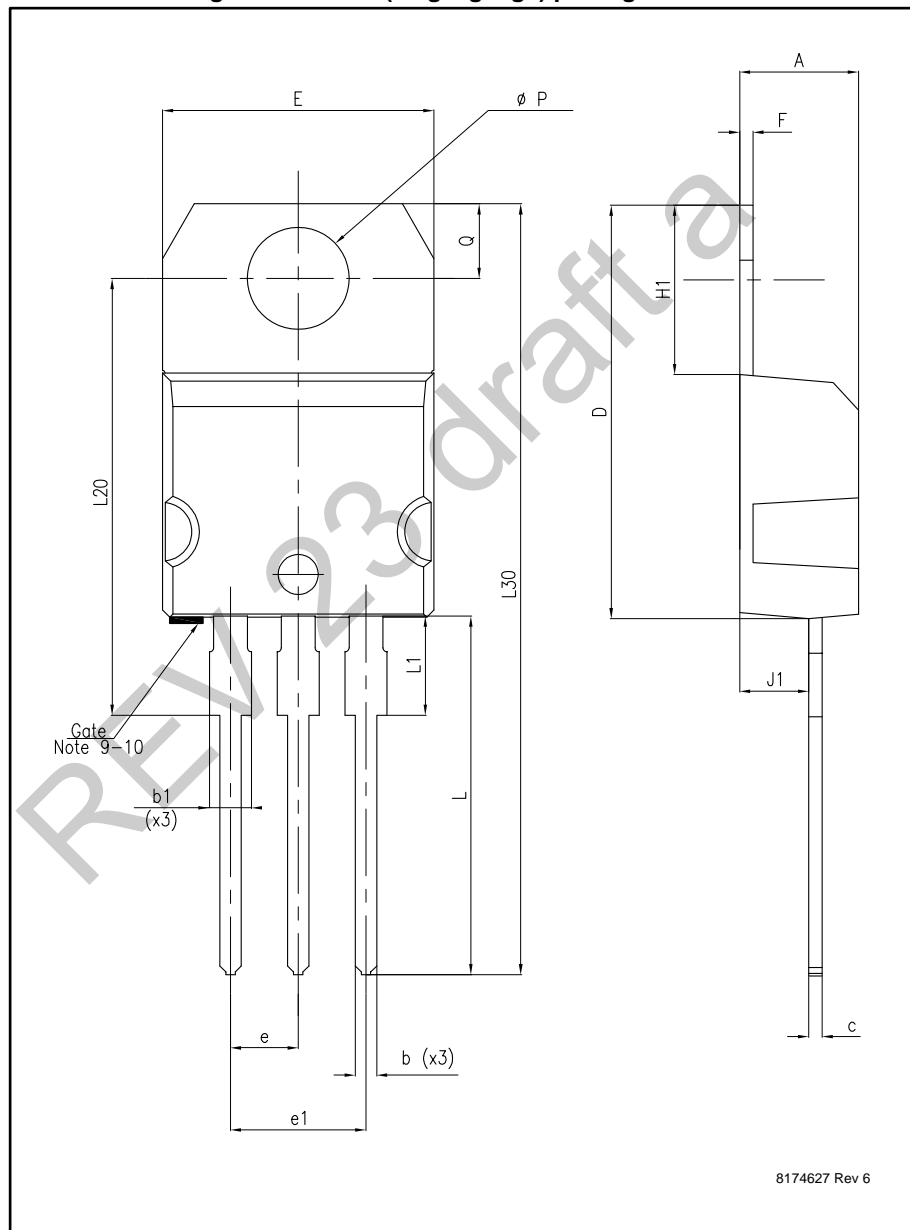
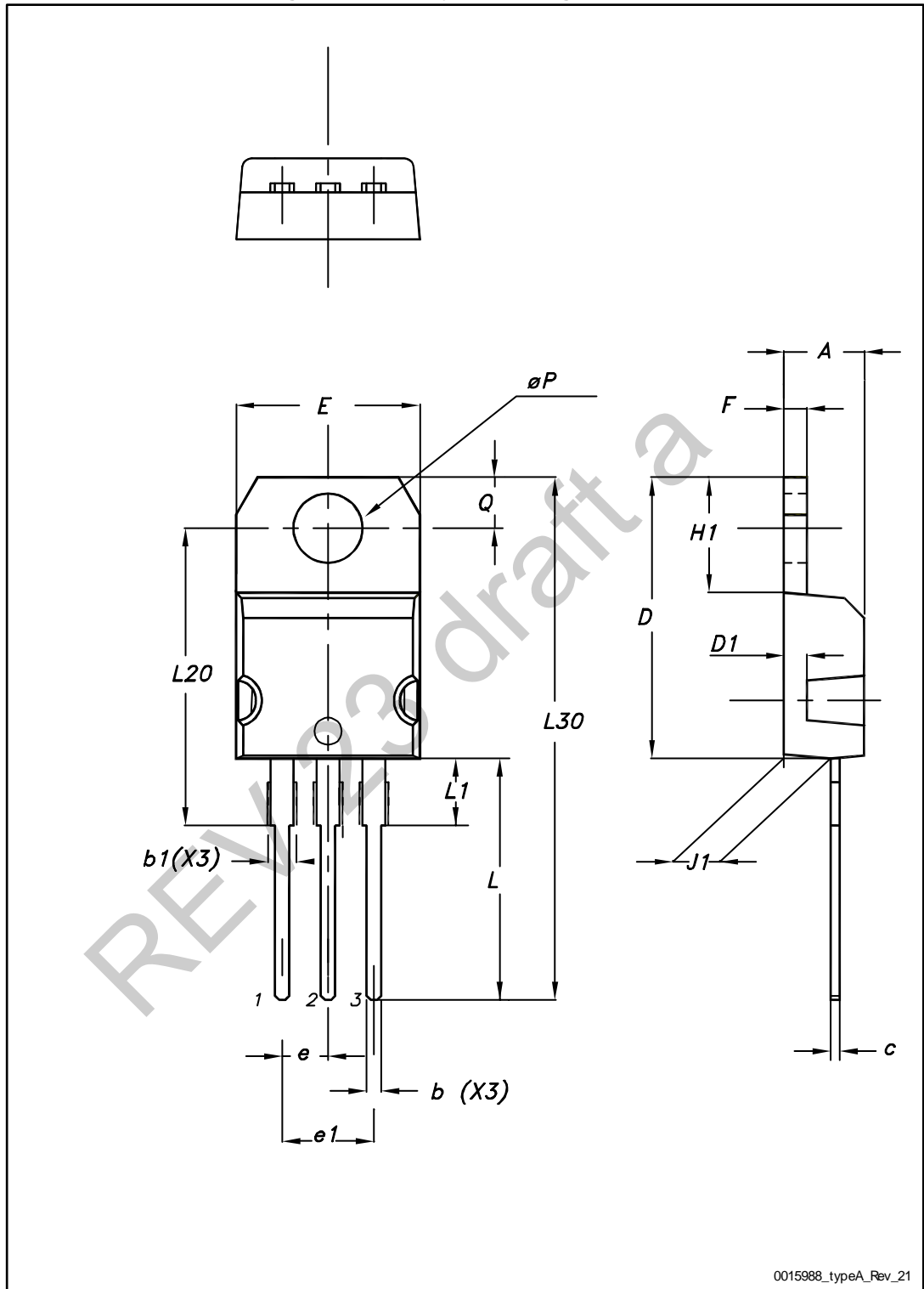


Table 11: TO-220 (single gauge) package mechanical data

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	10.00		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	13.00		14.00
L1	3.50		3.93
L20		16.40	
L30		28.90	
ΦP	3.75		3.85
Q	2.65		2.95

7.2 TO-220 (dual gauge) package information

Figure 9: TO-220 type A package outline



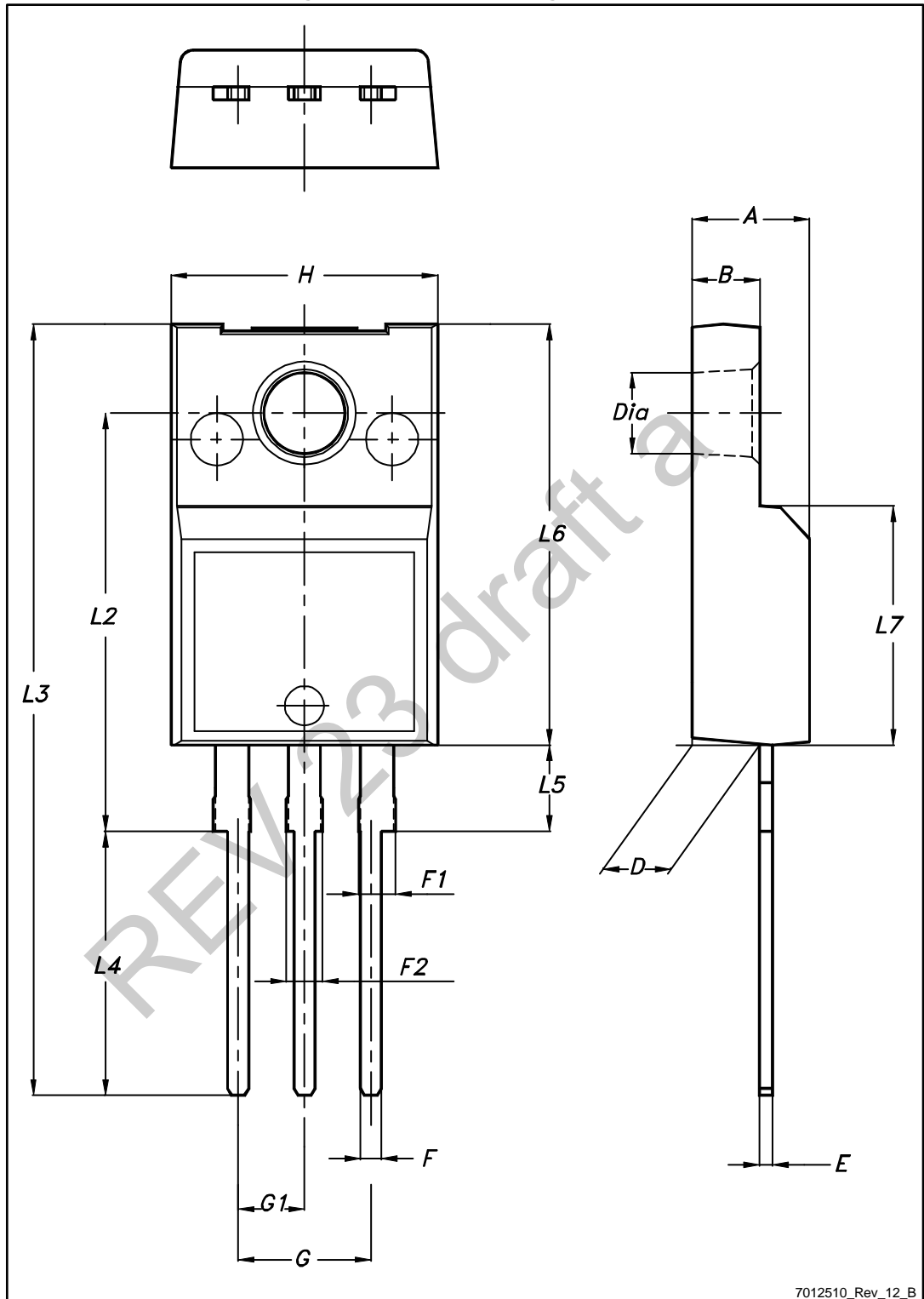
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Table 12: TO-220 type A package mechanical data

Dim.	mm		
	Min.	Typ.	Max.
A	4.40		4.60
b	0.61		0.88
b1	1.14		1.55
c	0.48		0.70
D	15.25		15.75
D1		1.27	
E	10.00		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	13.00		14.00
L1	3.50		3.93
L20		16.40	
L30		28.90	
øP	3.75		3.85
Q	2.65		2.95

7.3 TO-220FP package information

Figure 10: TO-220FP package outline



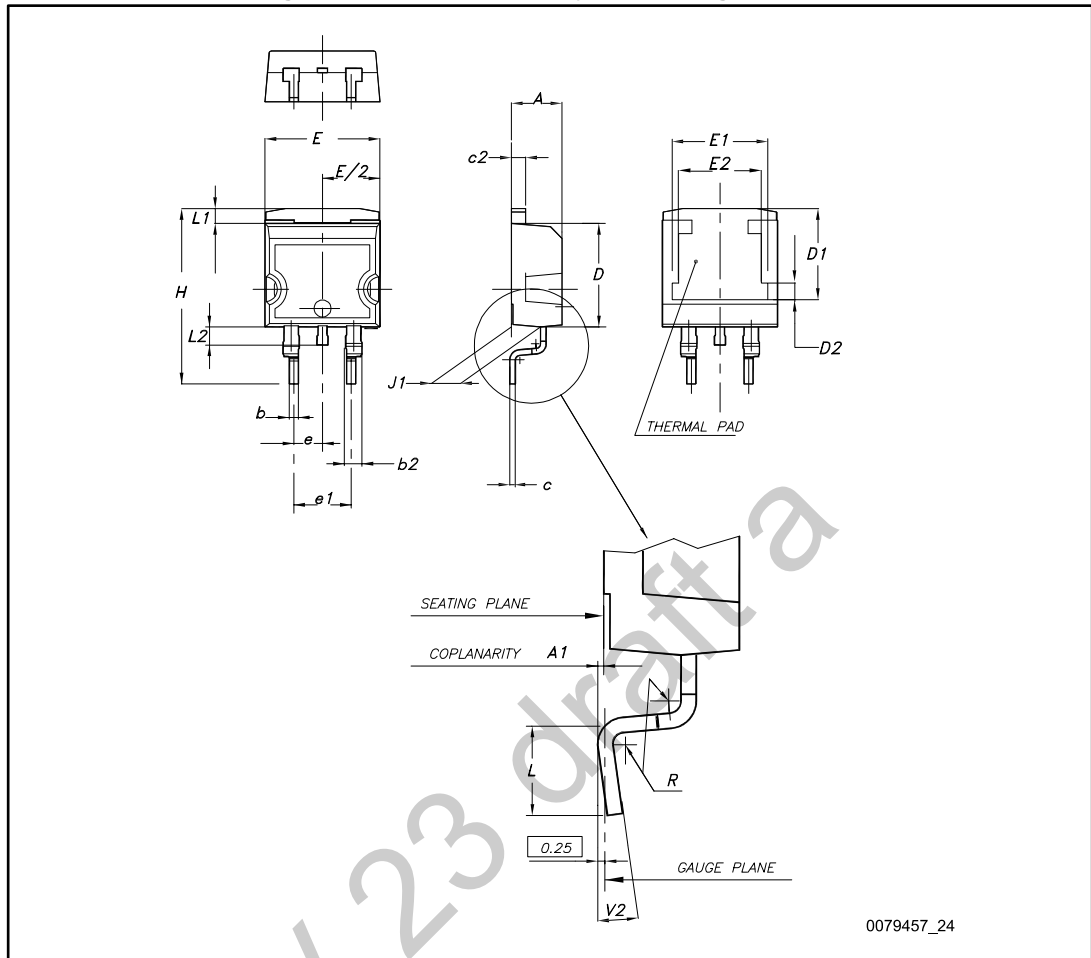
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Table 13: TO-220FP package mechanical data

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

7.4 D²PAK (TO-263) type A package information

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



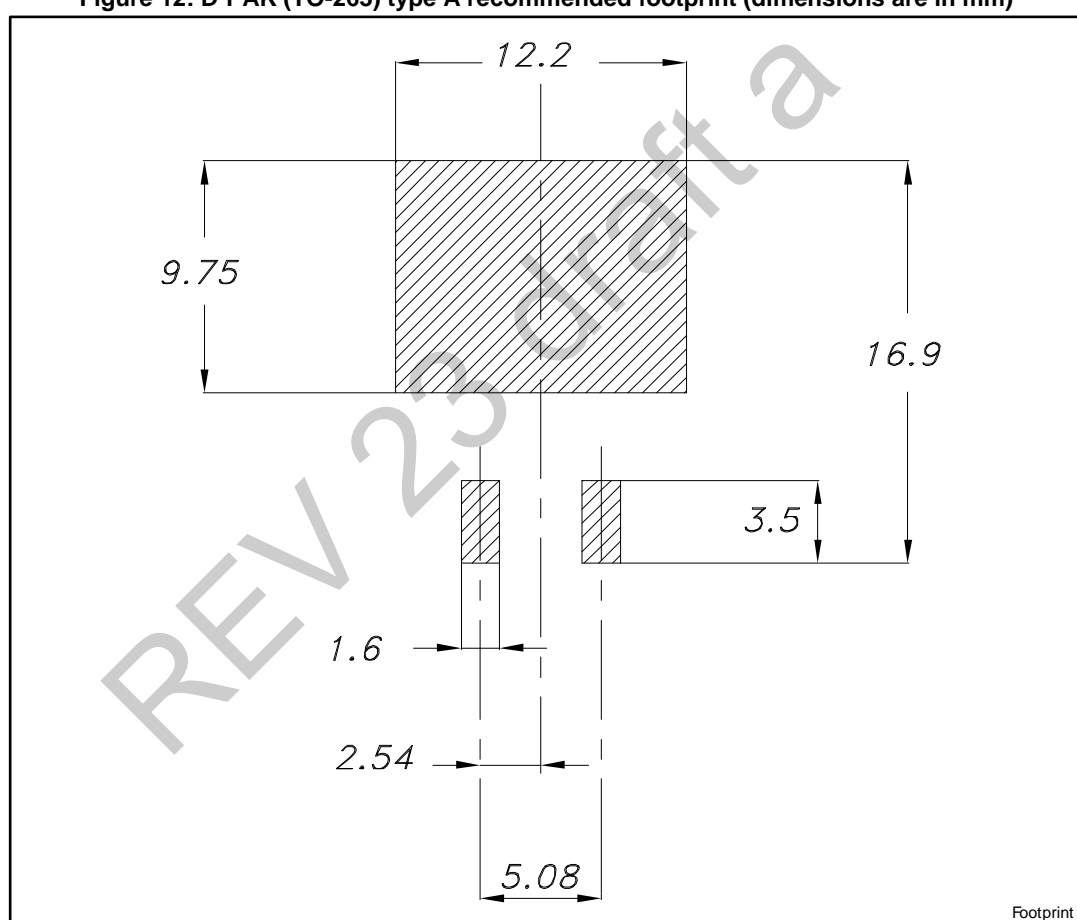
0079457_24

Table 14: D²PAK (TO-263) type A package 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	7.75	8.00
D2	1.10	1.30	1.50
E	10.00		10.40
E1	8.50	8.70	8.90
E2	6.85	7.05	7.25

Dim.	mm		
	Min.	Typ.	Max.
e		2.54	
e1	4.88		5.28
H	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)



7.5 D²PAK type A packing information

Figure 13: D²PAK type A tape outline

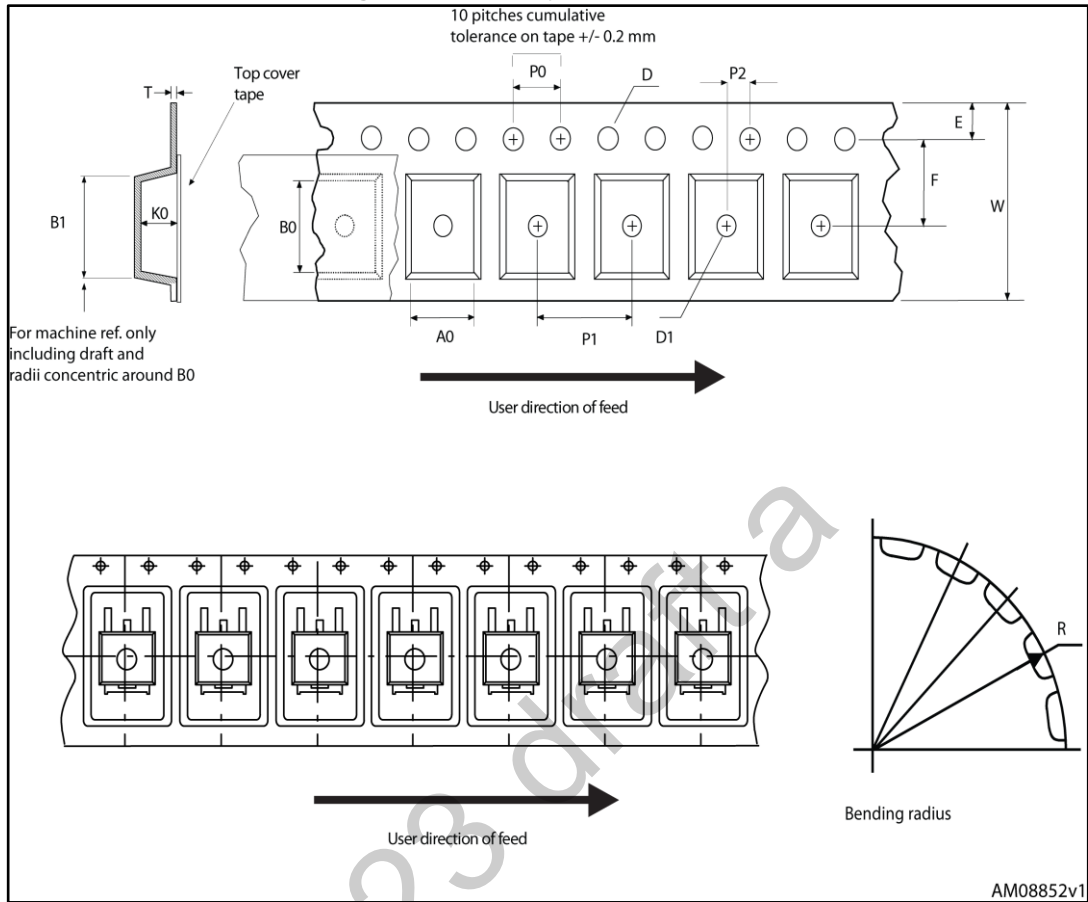
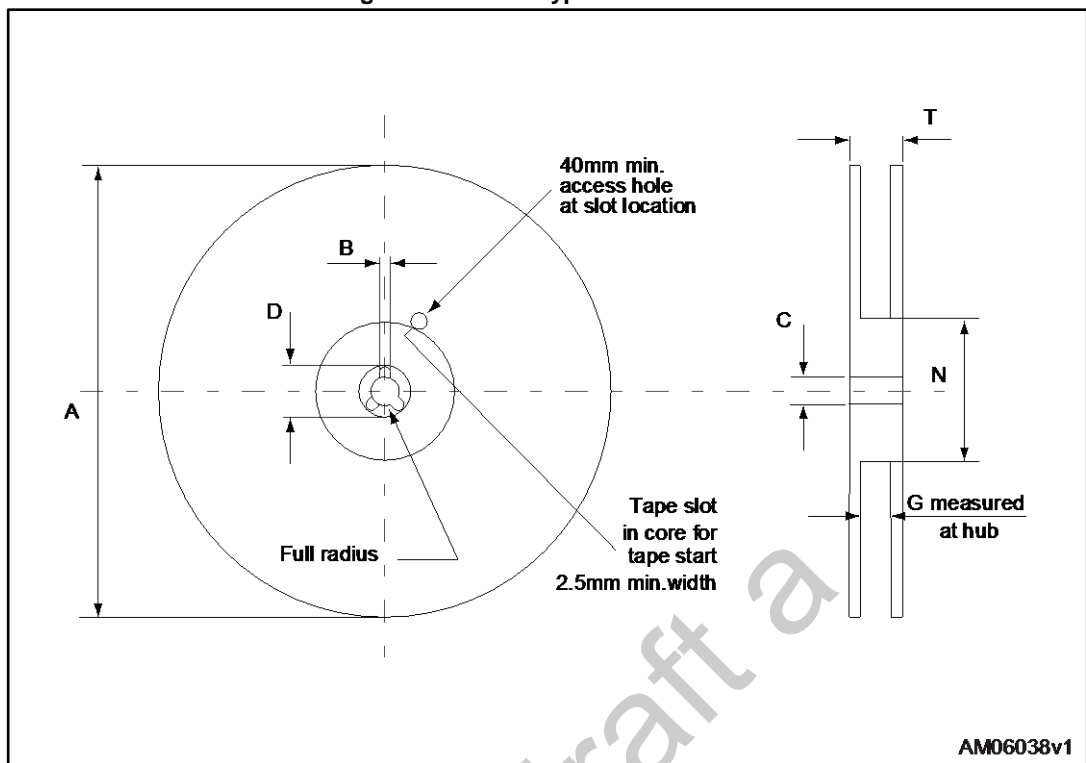


Figure 14: D²PAK type A reel outlineTable 15: D²PAK type A tape and reel mechanical data

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 quantity		1000
P2	1.9	2.1	Bulk quantity		1000
R	50				
T	0.25	0.35			
W	23.7	24.3			

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	D ² PAK mechanical data updated and add footprint data.
06-Jun-2007	12	Order codes updated.
25-Oct-2007	13	Modified: <i>Figure 3, Figure 4, Figure 6 and Figure 7.</i>
05-Dec-2007	14	Modified: <i>Table 1.</i>
18-Feb-2008	15	Modified: <i>Table 1 on page 1.</i>
15-Jul-2008	16	Modified: <i>Table 1 on page 1.</i>
19-Jan-2010	17	Modified: <i>Table 11 on page 14, added: Figure 8 on page 16, Figure 9 on page 17, Figure 10 and Figure 11 on page 18.</i>
26-May-2010	18	Modified: VI parameter <i>Table 2 on page 5.</i>
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 <i>Table 1 on page 1.</i>
15-May-2012	21	Added: order codes L7908CV-DG <i>Table 1 on page 1.</i>
04-Jun-2014	22	Part numbers L79xxC and L79xxAC changed to L79. Updated the features and the description in cover page. Updated <i>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.</i> Added <i>Section 8: Packaging mechanical data.</i> Minor text changes.
27-Sep-2017	23	In <i>Table 4: "Electrical characteristics of L7905AC"</i> : - updated I _{sc} and I _{scp} Typ. Values In <i>Table 5: "Electrical characteristics of L7905C"</i> : - updated I _{sc} Typ. Values In <i>Table 7: "Electrical characteristics of L7912AC"</i> : - updated I _{sc} Typ. Value - updated I _{scp} Test conditions and Typ. Value In <i>Table 8: "Electrical characteristics of L7915C"</i> : - updated I _{sc} Typ. Value In <i>Table 9: "Electrical characteristics of L7915AC"</i> : - updated I _{sc} Typ. Value - updated I _{scp} Test conditions and Typ. Value In <i>Table 10: "Electrical characteristics of L7915C"</i> - updated I _{sc} Typ. Value Updated <i>Section 7: "Package information"</i>

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