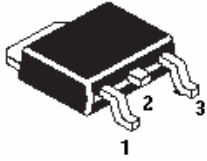


**3-TERMINAL POSITIVE VOLTAGE REGULATOR**

**CL7808DT**

**TO-252 (DPAK)  
Plastic Package**



Pin: 1 Input  
2 Ground  
3 Output

The voltages available allow these Regulators to be used in Logic Systems, Instrumentation, Hi-Fi Audio Circuits and other Solid State Electronic Equipment

**ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)**

DESCRIPTION	SYMBOL	VALUE	UNIT
Input Voltage	V <sub>IN</sub>	35 40	V
Power Dissipation	P <sub>D</sub>	5	W
Operating Junction Temperature Range	T <sub>j</sub>	+150	°C
Storage Temperature Range	T <sub>stg</sub>	- 65 to +150	°C

**THERMAL RESISTANCE**

Junction to Ambient in free air	R <sub>th(j-a)</sub>	92	°C/W
Junction to Case	R <sub>th(j-c)</sub>	5.0	°C/W

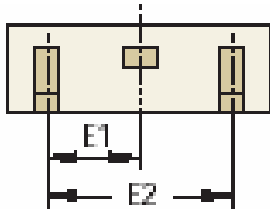
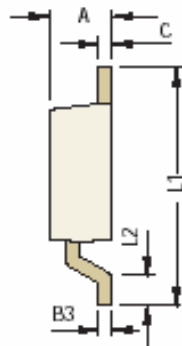
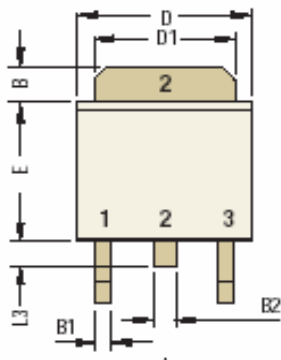
**ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25°C unless specified otherwise)**

V<sub>IN</sub>=15V, I<sub>O</sub>=100mA, T<sub>a</sub>=25°C

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	V <sub>O</sub>	I <sub>O</sub> =5mA ~ 1.5A V <sub>IN</sub> =10.5 ~ 23V, P <sub>D</sub> 15W	7.7		8.3	V
Line Regulation	R <sub>EGV</sub>	V <sub>IN</sub> =10.5 ~ 25V			80	mV
Load Regulation	R <sub>EGL</sub>	I <sub>O</sub> =5mA ~ 1.5A			80	mV
Quiescent Current	I <sub>Q</sub>				8.0	mA
Quiescent Current Change	I <sub>Q</sub>	V <sub>IN</sub> =10.5 ~ 25V			1.0	mA
		I <sub>O</sub> =5mA ~ 1A			0.5	mA
Input Voltage	V <sub>IN</sub>		10.5		25	V
Ripple Rejection Ratio	R <sub>R</sub>	V <sub>IN</sub> =11.5 ~ 21.5V, f=120Hz	58			dB
Max Output Current	I <sub>OM</sub>	T <sub>J</sub> =25°C		2.2		A
Output Voltage Drift	V <sub>T</sub>	I <sub>O</sub> =5mA, T <sub>J</sub> =0 ~ 125°C		- 0.4		mV/°C
Output Noise Voltage	V <sub>NO</sub>	f=10Hz ~ 100KHz		10		μV
Short Circuit Current Limit	I <sub>SC</sub>	T <sub>J</sub> =25°C		2.0		A

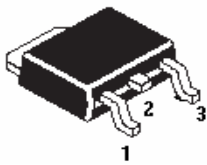
<b>MARKING</b>	<b>CL</b>
	<b>7808DT</b>
	<b>XY MX</b>
	<b>XY= Date Code</b>

Package TO-252 (DPAK)



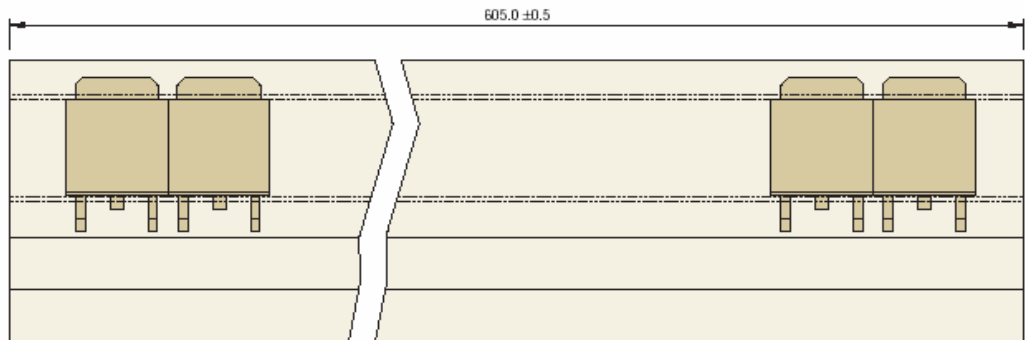
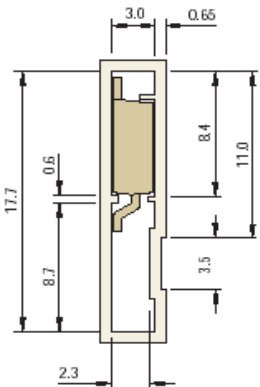
DIM	Min	max
A	2.20	2.40
B	1.30	1.50
B1	0.55	0.65
B2	0.75	0.85
B3	0.46	0.58
C	0.46	0.58
D	6.40	6.60
D1	5.20	5.40
E	5.40	5.60
E1	2.25	2.35
E2	4.50	4.70
L1	9.25	9.75
L2	0.50	
L3	0.90	1.10

All Dimensions are in mm



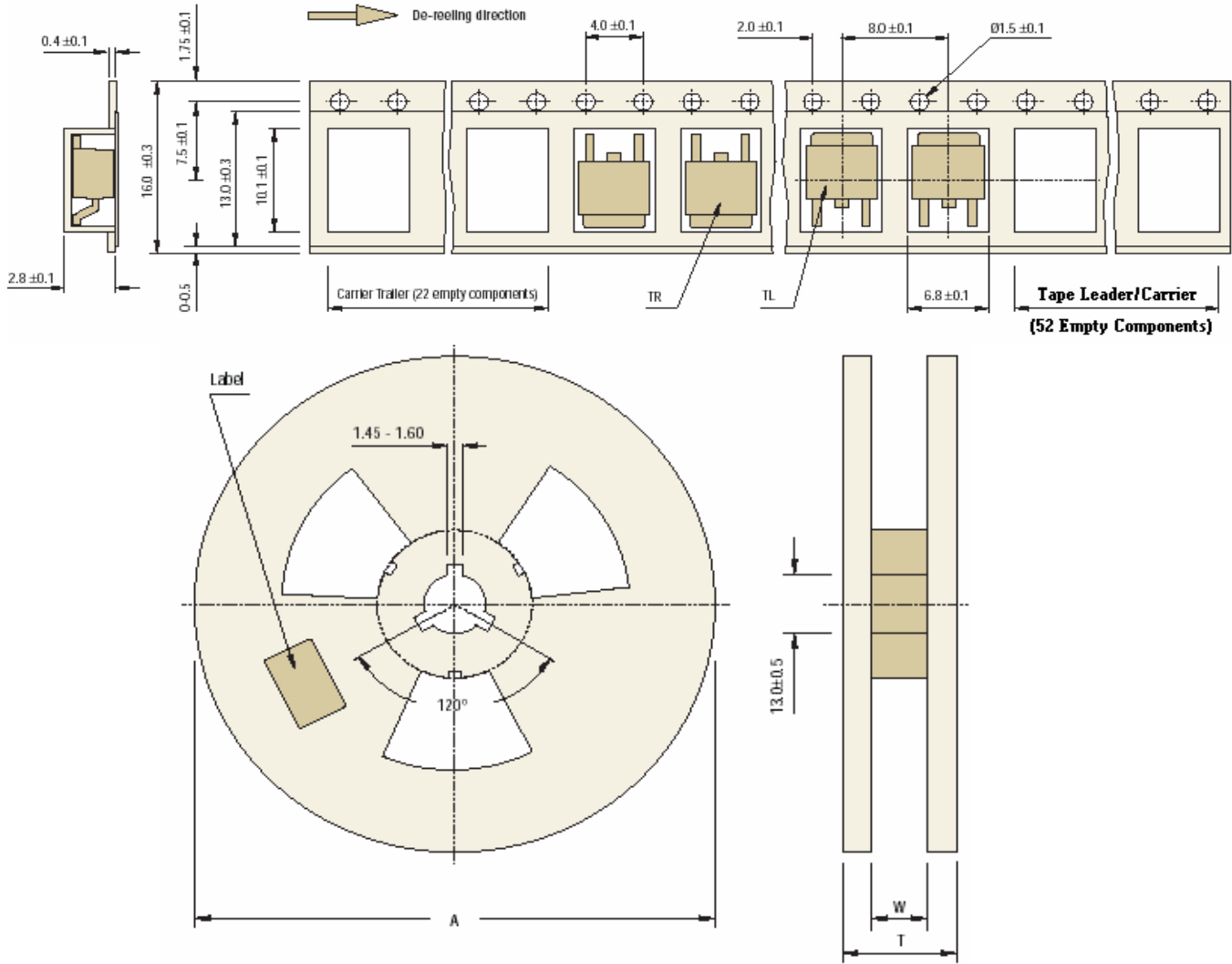
Pin: 1 Input  
2 Ground  
3 Output

TO-252 (DPAK) Tube Packing



Qty: 80 pcs/Tube

TO-252 (DPAK) Tape and Reel Specification



Reel Specifications

Package	Tape Width	Reel Dia. A - Max	Devices Per Reel and MOQ	Inside Thickness W	Reel Thickness T - max
TO-252 (DPAK)	16	330	2,500	17.5 ± 1.5	24.0

All Dimensions are in mm

Packaging Information

Package/ Case Type	Packaging Type	Std. Packing Qty
TO-252 (DPAK)	Tube	1,600
TO-252 (DPAK)	T & R	2,500

T & R: Tape and Reel  
Tube : 80 pcs/Tube

### **Disclaimer**

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