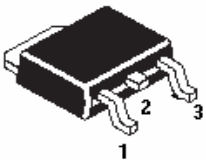
3-TERMINAL POSITIVE VOLTAGE REGULATOR

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_a=25ºC)

DESCRIPTION	SYMBOL	VALUE	UNIT
Input Voltage	V_{IN}	35 40	V
Power Dissipation	P_D	5	W
Operating Junction Temperature Range	T_j	+150	ºC
Storage Temperature Range	T_{stg}	- 65 to +150	ºC

THERMAL RESISTANCE

Junction to Ambient in free air	$R_{th\ (j-a)}$	92	ºC/W
Junction to Case	$R_{th\ (j-c)}$	5.0	ºC/W

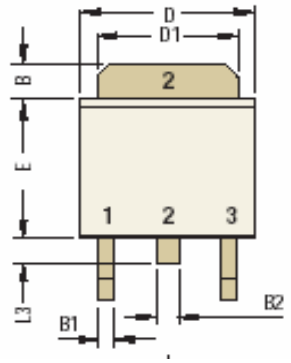
ELECTRICAL CHARACTERISTICS (T_a=25ºC unless specified otherwise)

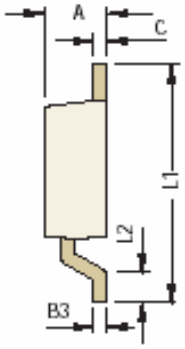
V_{IN}=15V, I_O=100mA, T_a=25ºC

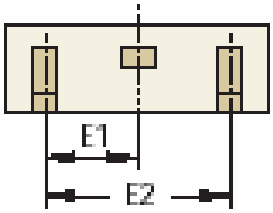
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	V_O	I_O=5mA ~ 1.5A V_{IN}=10.5 ~ 23V, P_D 15W	7.7		8.3	V
Line Regulation	R_{EGV}	V_{IN}=10.5 ~ 25V			80	mV
Load Regulation	R_{EGL}	I_O=5mA ~ 1.5A			80	mV
Quiescent Current	I_Q				8.0	mA
Quiescent Current Change	I_Q	V_{IN}=10.5 ~ 25V			1.0	mA
		I_O=5mA ~ 1A			0.5	mA
Input Voltage	V_{IN}		10.5		25	V
Ripple Rejection Radio	R_R	V_{IN}=11.5 ~ 21.5V, f=120Hz	58			dB
Max Output Current	I_{OM}	T_J=25ºC		2.2		A
Output Voltage Drift	$V/_T$	I_O=5mA , T_J=0 ~ 125ºC		- 0.4		mV/ºC
Output Noise Voltage	V_{NO}	f=10Hz ~ 100KHz		10		µV
Short Circuit Current Limit	I_{SC}	T_J=25ºC		2.0		A

MARKING	**CL** **7808DT** **XY MX**
XY= Date Code	

Package TO-252 (DPAK)

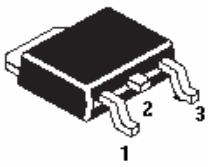






DIM	Min	max
A	2.20	2.40
B	1.30	1.50
B1	0.55	0.65
B2	0.75	0.85
B3	0.46	0.58
C	0.46	0.58
D	6.40	6.60
D1	5.20	5.40
E	5.40	5.60
E1	2.25	2.35
E2	4.50	4.70
L1	9.25	9.75
L2	0.50	
L3	0.90	1.10

All Dimensions are in mm



Pin: 1 Input
2 Ground
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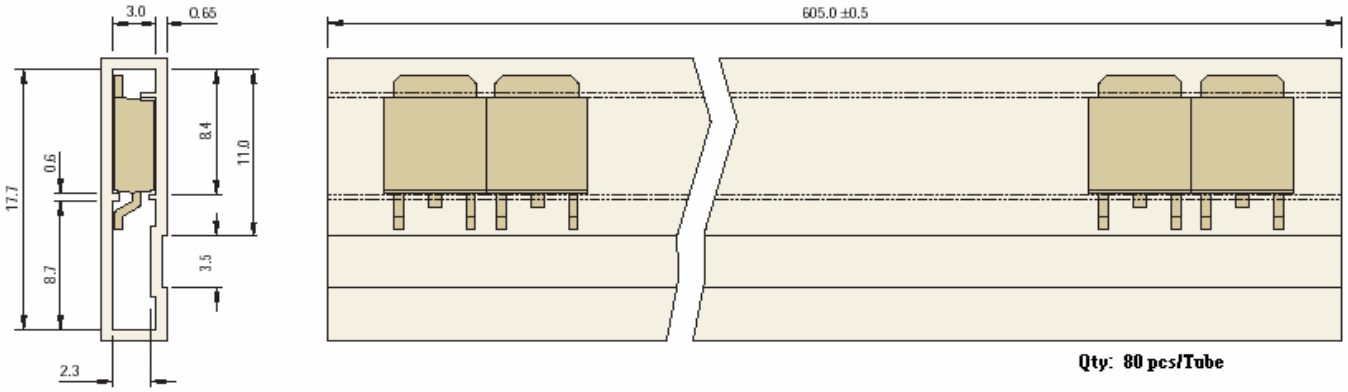
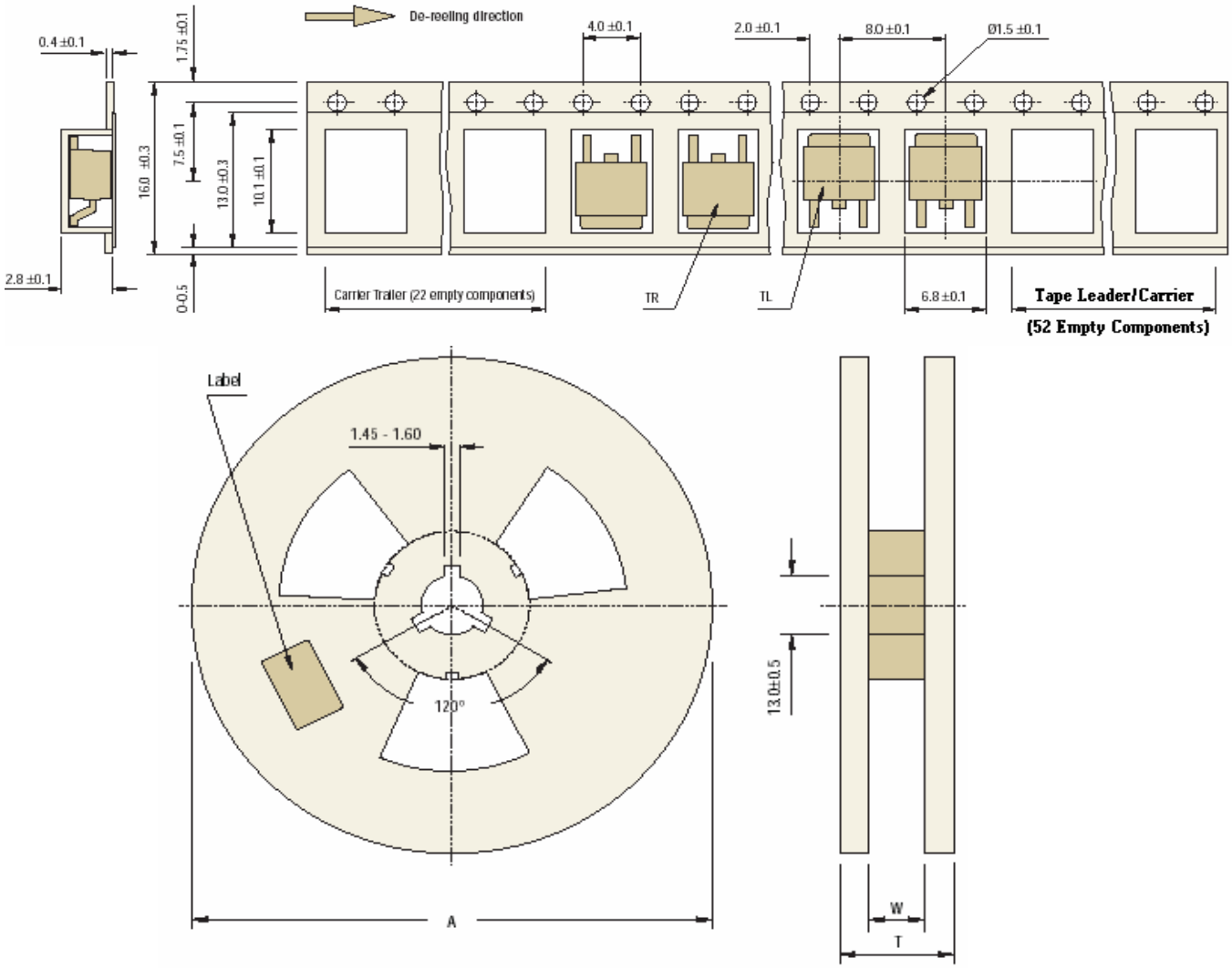
TO-252 (DPAK) Tube Packing



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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Continental Device India Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 5141 1112 Fax + 91-11-2579 5290, 5141 1119
email@cdil.com www.cdilsemi.com