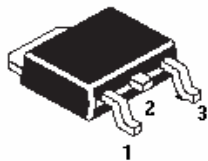


3-TERMINAL POSITIVE VOLTAGE REGULATOR

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 ($T_a=25^\circ\text{C}$)

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

THERMAL RESISTANCE

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

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless specified otherwise)

$V_{IN}=15\text{V}$, $I_O=100\text{mA}$, $T_a=25^\circ\text{C}$

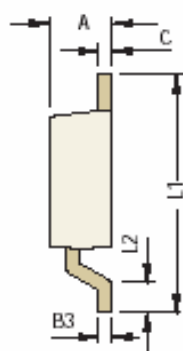
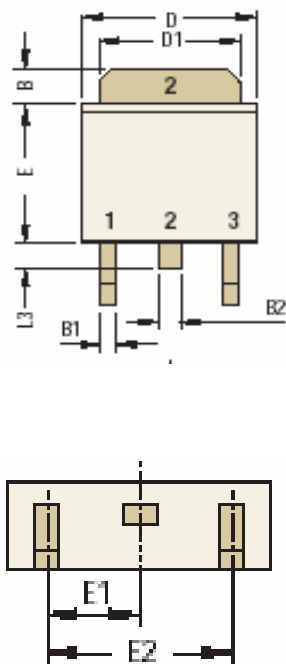
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	V_O	$I_O=5\text{mA} \sim 1.5\text{A}$ $V_{IN}=10.5 \sim 23\text{V}$, $P_D 15\text{W}$	7.7		8.3	V
Line Regulation	R_{EGV}	$V_{IN}=10.5 \sim 25\text{V}$			80	mV
Load Regulation	R_{EGL}	$I_O=5\text{mA} \sim 1.5\text{A}$			80	mV
Quiescent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

MARKING

CL
7808DT
XY MX

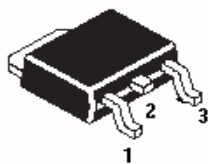
XY= Date Code

Package TO-252 (DPAK)



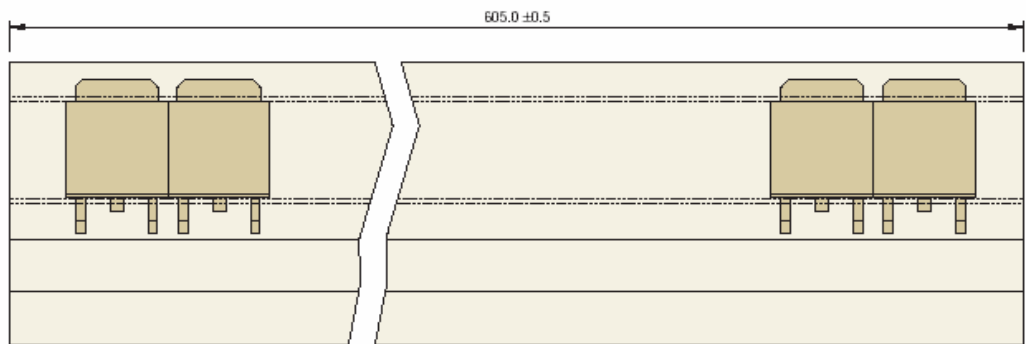
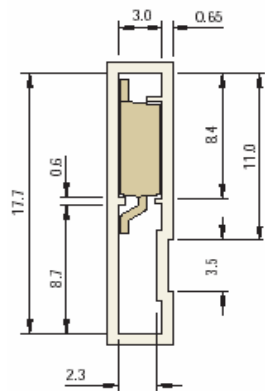
DIM	Min	max
A	2.20	2.40
B	1.30	1.50
B1	0.55	0.65
B2	0.75	0.85
B3	0.46	0.58
C	0.46	0.58
D	6.40	6.60
D1	5.20	5.40
E	5.40	5.60
E1	2.25	2.35
E2	4.50	4.70
L1	9.25	9.75
L2	0.50	
L3	0.90	1.10

All Dimensions are in mm

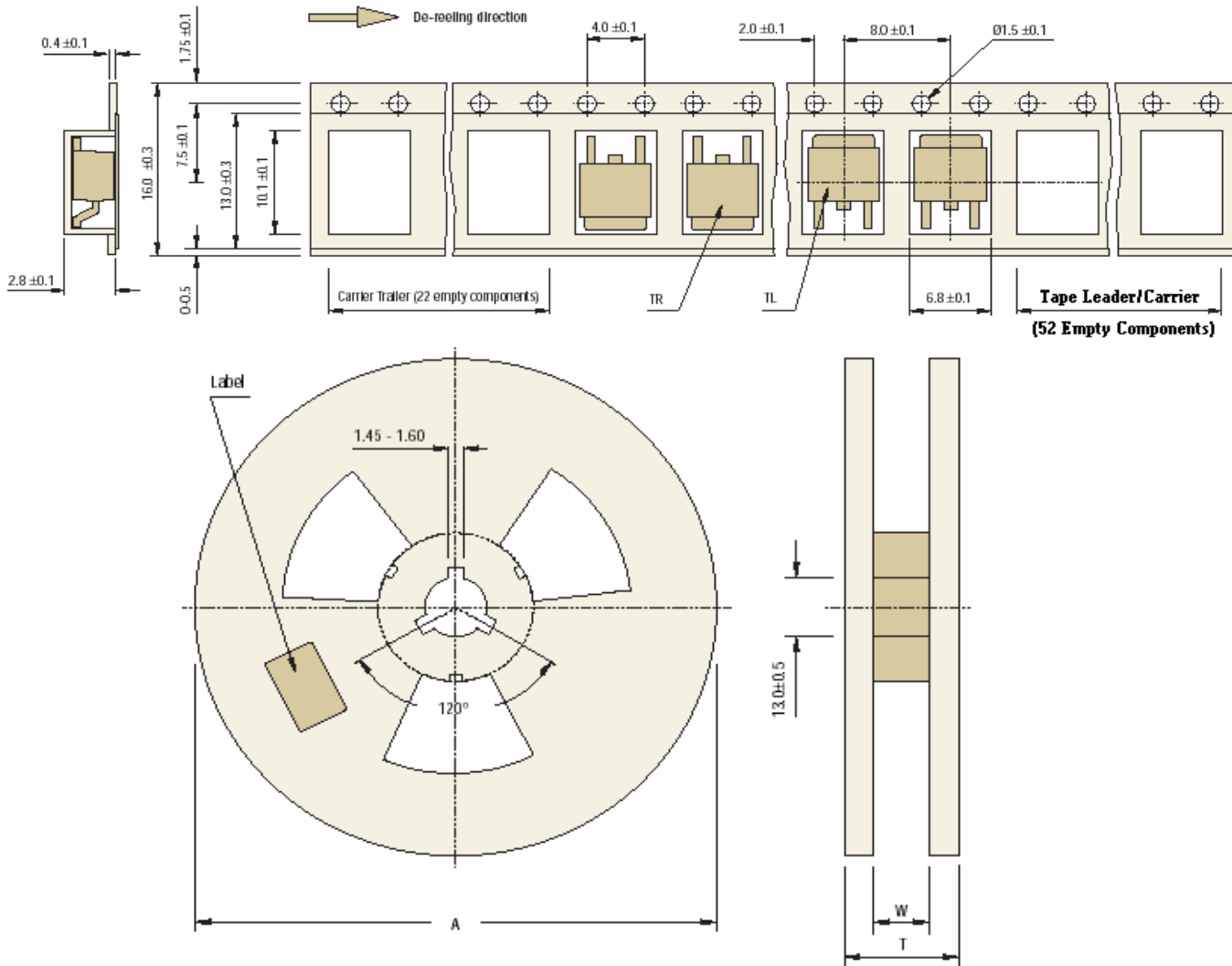


Pin: 1 Input
2 Ground
3 Output

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

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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