

Continental Device India Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

# 

## **3-TERMINAL POSITIVE VOLTAGE REGULATOR**



Pin: 1 Input 2 Ground 3 Output CL7808DT

TO-252 (DPAK) Plastic Package

# 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	V
		40	v
Power Dissipation	P <sub>D</sub>	5	W
Operating Junction Temperature	T.	+150	°C
Range	۰j	130	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>0</sub>=100mA, T<sub>a</sub>=25°C

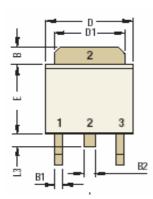
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	Vo	I <sub>0</sub> =5mA ~ 1.5A	77		0.0	V
		V <sub>IN</sub> =10.5 ~ 23V, P <sub>D</sub> 15W	7.7		8.3	V
Line Regulation	R <sub>EGV</sub>	V <sub>IN</sub> =10.5 ~ 25V			80	mV
Load Regulation	R <sub>EGL</sub>	I <sub>O</sub> =5mA ~ 1.5A			80	mV
Quiescent Current	Ι <sub>Q</sub>				8.0	mA
Quiescent Current Change	Ι <sub>Q</sub>	V <sub>IN</sub> =10.5 ~ 25V			1.0	mA
		I <sub>0</sub> =5mA ~ 1A			0.5	mA
Input Voltage	V <sub>IN</sub>		10.5		25	V
Ripple Rejection Radio	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		А
Output Voltage Drift	V/ <sub>T</sub>	I <sub>O</sub> =5mA , T <sub>J</sub> =0 ~ 125°C		- 0.4		mV/ºC
Output Noise Voltage	V <sub>NO</sub>	f=10Hz ~ 100KHz		10		μV
Short Circuit Current Limit	I <sub>SC</sub>	T_1=25°C		2.0		A

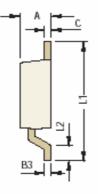
MARKING	CL	
	7808DT	
	ΧΥ ΜΧ	
XY= Date Code		

## CL7808DT

TO-252 (DPAK) Plastic Package

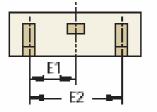
## Package TO-252 (DPAK)

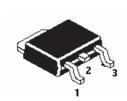




DIM	Min	max	
А	2.20	2.40	
В	1.30	1.50	
B1	0.55	0.65	
B2	0.75	0.85	
B3	0.46	0.58	
С	0.46	0.58	
D	6.40	6.60	
D1	5.20	5.40	
Е	5.40	5.60	
E1	2.25	2.35	
E2	4.50	4.70	
L1	9.25	9.75	
L2	0.50		
L3	0.90	1.10	

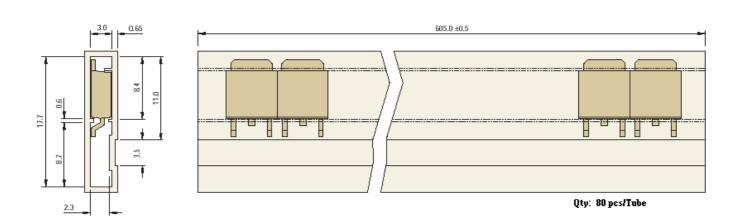
All Dimensions are in mm





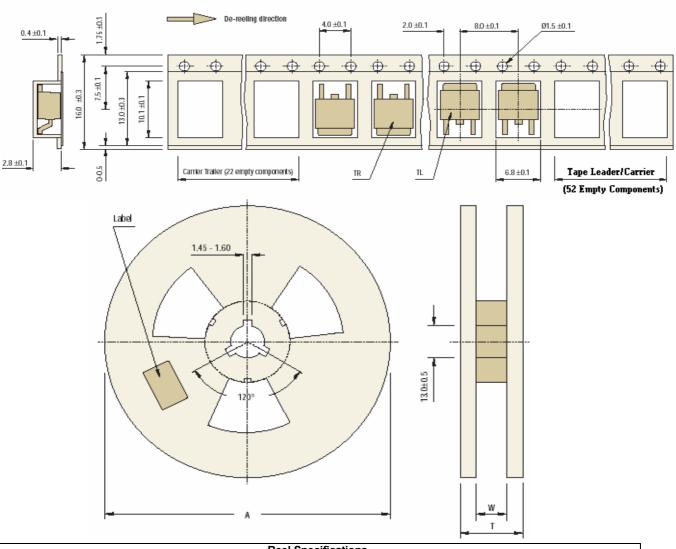
Pin: 1 Input 2 Ground 3 Output

## TO-252 (DPAK) Tube Packing



CL7808DT Rev150905E

TO-252 (DPAK) Plastic Package



## TO-252 (DPAK) Tape and Reel Specification

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

#### CL7808DT

TO-252 (DPAK) Plastic Package

#### Disclaimer

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