

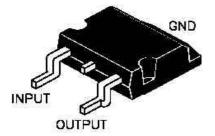
Continental Device India Limited An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

**3-TERMINAL POSITIVE VOLTAGE REGULATOR** 



CL7805D2T

D<sup>2</sup>PAK (TO-263) 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

DESCRIPTION	SYMBOL	VALUE	UNIT	
Input Voltage	V <sub>IN</sub>	35	V	
Continuous Total Dissipation at T <sub>a</sub> =25 <sup>o</sup> C	P <sub>D</sub>	2.0	W	
free air Temperature	1	2.0	VV	
Continuous Total Dissipation at T <sub>c</sub> =25 <sup>o</sup> C	P <sub>D</sub>	15	W	
case Temperature	4	10	٧v	
Operating free-air, case, or Virtual Junction	T <sub>OPR</sub>	0 to 150	°C	
Temperature Range		0.0100	-0	
Storage Temperature Range	T <sub>stg</sub>	- 65 to +150	°C	
Lead Temperature 1.6mm (1/16 inch) from	DataSheet4U.com	260	Data ⁰C	
Case for 10 seconds	ΤL	200		

# ELECTRICAL CHARACTERISTICS (Tj=25°C unless specified otherwise)

## V<sub>I</sub>=10V, I<sub>0</sub>=500mA

DESCRIPTION	SYMBOL	TEST CONDITION		MIN	TYP	MAX	UNIT
Output Voltage	Vo		Tj=25⁰C	4.80		5.20	V
		I <sub>O</sub> =5mA ~ 1A V <sub>I</sub> =7V ~ 20V, P <u>&lt;</u> 15W	T <sub>j</sub> =0 ~ 125°C	4.75		5.25	V
Line Regulation	R <sub>EGV</sub>	V <sub>I</sub> =7.0 ~ 25V	Tj=25⁰C			100	mV
		V <sub>I</sub> =8.0 ~ 12V				50	mV
Ripple Rejection	R <sub>R</sub>	V <sub>I</sub> =8.0 ~ 18V, f=120Hz	T <sub>j</sub> =0 ∼ 125ºC	62			dB
Load Regulation	R <sub>EGL</sub>	I <sub>O</sub> =5mA ~ 1.5A	Tj=25⁰C			100	mV
		I <sub>0</sub> =250mA ~ 750mA				50	mV
Output Resistance	Ro	f=1KHz	T <sub>j</sub> =0 ~ 125°C		0.017		Ω
Output Voltage Drift	$\Delta V_{O} / \Delta T$	I <sub>O</sub> =5mA	T <sub>j</sub> =0 ~ 125°C		- 1.1		mV/⁰C
Output Noise Voltage	V <sub>NO</sub>	f=10Hz ~ 100KHz	Tj=25⁰C		40		μV
Dropout Voltage	V <sub>d</sub>	I <sub>O</sub> =1A	T <sub>j</sub> =25⁰C		2.0		V
Quiescent Current	Ι <sub>Q</sub>		T <sub>j</sub> =25⁰C			8.0	mA
Quiescent Current Change	$\Delta I_Q$	V <sub>I</sub> =7.0 ~ 25V	T <sub>j</sub> =0 ~ 125°C			1.3	mA
		I <sub>0</sub> =5mA ~ 1A				0.5	mA
Short Circuit Output Current	I <sub>SC</sub>		Tj=25⁰C		750		mA
Peak Output Current	I <sub>PK</sub>		Tj=25⁰C		2.2		А

www.DataSheet4U.com

## CL7805D2T

TYP,

8

0.4

MAX.

4.8

2.69

0.23

0.93

1.7

0.6

1.36

9.35

10.4

5.28

15.85

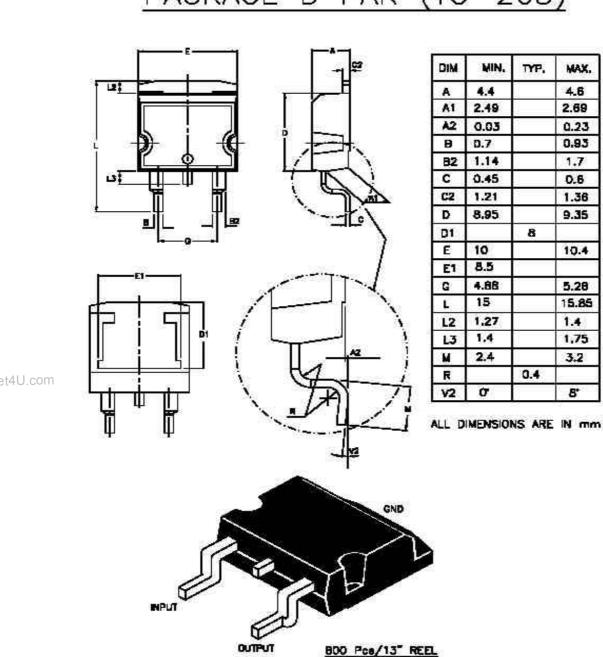
1.4

1,75

3.2

8

D<sup>2</sup>PAK (TO-263) **Plastic Package** 



# PACKAGE D<sup>2</sup>PAK (TO-263)

DataShe

#### CLM7805D2T Rev180805E

DataSheet4U.com

Continental Device India Limited

www.DataSheet4U.com

#### CL7805D2T

# D<sup>2</sup>PAK (TO-263)

#### **Component Disposal Instructions**

- 1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
- 2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

#### **Customer Notes**

et4U.com

DataSheet4U.com

#### 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 Discrete 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).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of **Continental Device India Limited** C-120 Naraina Industrial Area, New Delhi 110 028, India. Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119 email@cdil.com www.cdilsemi.com

DataCLM7805D2T Rev180805E

Continental Device India Limited

Data Sheet

www.DataSheet4U.com