

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



## VOLTAGE REGULATOR



Lead 1.Output 2.Ground 3.Input

### LM78L12

TO-92 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
Power Dissipation	P <sub>D</sub>	625	mW
Junction to Ambient in free air	T <sub>amb</sub>	0 to +150	°C
Storage Temperature Range	T <sub>stg</sub>	- 55 to +150	°C

#### ELECTRICAL CHARACTERISTICS (T<sub>a</sub>=25<sup>o</sup>C unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	Vo	V <sub>I</sub> =19V, I <sub>O</sub> =40mA	11.50		12.50	V
		I <sub>O</sub> =1mA to 40mA, 0⁰C to 125⁰C	11.40		12.60	V
		V <sub>I</sub> =14V to 27V,0°C to 125°C	11.40		12.60	V
Ripple Rejection	R <sub>R</sub>	V <sub>I</sub> =15V to 25V, f=120Hz	37			dB
Line Regulation	R <sub>BGIN</sub>	$V_{I}$ =14.5V to 27V, $I_{O}$ =40mA			250	mV
		V <sub>I</sub> =16 to 27V			200	mV
Load Regulation	R <sub>BGL</sub>	$I_0=1$ mA to 100mA, $V_1=19V$			100	mV
		I <sub>O</sub> =1mA to 40mA			50	mV
Output Noise Voltage	V <sub>NO</sub>	f=10Hz to 100KHz		70		μV
Dropout Voltage	V <sub>DIF (min)</sub>	V <sub>I</sub> =19V, I <sub>O</sub> =40mA		1.7		V
Quiescent Current	Ι <sub>Q</sub>	$V_1 = 19V, I_0 = 40mA, T_a = 25^{\circ}C$			6.5	mA
		$V_1$ =19V, $I_0$ =40mA , $T_a$ =125°C			6.0	mA
Quiescent Current Change	$\Delta I_{QIN}$	$V_{I}$ =16V to 27V, $I_{O}$ =40mA, $T_{a}$ =0°C to 125°C			1.5	mA
	Δl <sub>QL</sub>	$I_0=1$ mA to 40mA, $V_1=19V$ $T_a=0^{\circ}C$ to 125°C		-	0.1	mA

LM78L12Rev060905D

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#### 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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