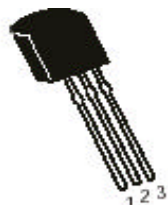


POSITIVE VOLTAGE REGULATOR

LM78L15

TO-92

Plastic Package



pin 1.Output
2.Ground
3.Input

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_{IN}	35	V
Power Dissipation	P_D	625	mW
Operating free air, Case, or Virtual Junction Temperature Range	T_j	0 to 150	°C
Storage Temperature Range	T_{stg}	- 65 to +150	°C
Lead Temperature 1.6mm (1/16inch) from Case for 10 seconds	T_L	260	°C

Recommended Operating Conditions

DESCRIPTION	SYMBOL	MIN	TYP	MAX	UNIT
Input Voltage	V_I	17.5		30	V
Output Current	I_O			100	mA
Operating Junction Temperature	T_j	0		125	°C

ELECTRICAL CHARACTERISTICS

(At Specified Virtual Junction Temperature, $V_I=23V$, $I_O=40mA$, (unless specified otherwise))

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	V_O	25°C	14.4		15.6	V
		$I_O=1mA$ to 40mA, 0°C to 125°C $V_I=17.5V$ to 30V, 0°C to 125°C	14.25		15.75	V
		$I_O=1mA$ to 70mA, 0°C to 125°C	14.25		15.75	V
Line Regulation	R_{BGIN}	$V_I=17.5V$ to 30V, 25°C			300	mV
		$V_I=19$ to 30V, 25°C			250	mV
Ripple Rejection	R_R	$V_I=18.5V$ to 28.5V, $f=120Hz$, 0°C to 125°C	34			dB
Load Regulation	R_{BGL}	$I_O=1mA$ to 100mA, 25°C			150	mV
		$I_O=1mA$ to 40mA, 25°C			75	mV
Output Noise Voltage	V_{NO}	$f=10Hz$ to 100KHz, 25°C		82		μV
Dropout Voltage	$V_{DIF (min)}$	25°C		1.7		V
Quiescent Current	I_Q	25°C			6.5	mA
		125°C			6.0	mA
Quiescent Current Change	ΔI_{QIN}	$V_I=19V$ to 30V, 0°C to 125°C			1.5	mA
	ΔI_{QL}	$I_O=1mA$ to 40mA, 0°C to 125°C			0.1	mA

LM78L15Rev140406E

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).

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