

Continental Device India Limited

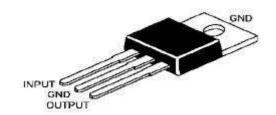
An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



3-TERMINAL POSITIVE VOLTAGE REGULATOR

LM7818

TO-220 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_{IN}	35	V
Power Dissipation at T _a =25°C	P_{D}	2	W
Power Dissipation at T _c =25°C	P_{D}	15	W
Operating Free Air, Case, or Virtual JunctionTemperature Range	T _j	0 to +150	ōС
Storage Temperature Range	T_{stg}	- 65 to +150	ōC
Lead Temperature 1.6mm (1/16 inch) from Case for 10 seconds	T _L	260	ōС

Recommended Operating Conditions

DESCRIPTION	SYMBOL	MIN	TYP	MAX	UNIT
Input Voltage	V _I	21		33	V
Output Current	Ι _ο			1.5	Α
Operating Junction Temperature	T _j	0		125	ōC

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)

$V_1=27V, I_0=500mA, T_a=25^{\circ}C$

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Output Voltage	Vo	25ºC	17.3		18.7	V
		I _O =5mA ∼ 1A				
		V _{IN} =21 ~ 33V, P <u><</u> 15W, 0 ^o C	17.1		18.9	V
		~125ºC				
Line Regulation	R_{EGV}	$V_{IN}=21 \sim 33V, 25^{\circ}C$			360	mV
		$V_{IN}=24 \sim 30V, 25^{\circ}C$			180	mV
Ripple Rejection	R_R	V_{IN} =22 ~ 32V, f=120Hz,	53			dB
		0ºC~125ºC				uБ
Load Regulation	R_{EGL}	I _O =5mA ~ 1.5A , 25ºC			360	mV
		I _O =250mA ∼ 750mA , 25ºC			180	mV
Output Resistance	rO	f=1KHz, 0°C~125°C		0.022		Ω
Temperature Coefficient of Output Voltage	$\Delta V_{O}/\Delta T$	I _O =5mA, 0ºC~125ºC		-1.0		mV/ºC
Output Noise Voltage	V_{NO}	f=10Hz ~100KHz, 25°C		110		μV
Dropout Voltage	$V_{DIF(min)}$	I _O =1A , 25ºC		2.0		V
Quiescent Current	Ι _Q	25ºC			8.0	mA
Quiescent Current Change	ΔI_{QIN}	V _{IN} =21 ~ 33V, 0°C~125°C			1.0	mA
		I _O =5mA ~ 1A, 0°C~125°C			0.5	mA
Short Circuit Output Current	I _{sc}	25ºC		200		mA
Peak Output Current	I _{omax}	25ºC		2.1		Α

LM7818Rev100706E

Customer Notes LM7818

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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).

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.



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