6 AMP OVERVOLTAGE PROTECTORS

L-6-OV



FEATURES

- Temperature compensated trip point
- Suitable for any current limited DC source
- No additional components required

DESCRIPTION

The L-6-OV Series of overvoltage protectors are monolithic devices designed to prevent damage to a load caused by excessive power supply output voltage. Load protection is accomplished by effectively short circuiting the output terminals of the power supply when the trip point voltage limit of the overvoltage protector is exceeded. The L-6-OV is reset when power to the overvoltage protector is interrupted and its case temperature has fallen below 71°C. An external heatsink (often the power supply chassis) is required to maintain case temperature below rated limit.

The L-6-OV Series is available for nominal supply voltages from 5 to 24 volts. The trip point voltage is fixed and cannot be adjusted. This two terminal device is available in hermetically sealed, TO-3 steel packages.

ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	MUMIXAM	UNITS
On State Voltage ¹	V _{DC}	2.6	Volts
On State Current	I _{DC}	6	Amps
Non-Repetitive Peak ² Surge Current	I _{PK}	70	Amps
Standby Current	l _o	35	mA
On State Power Dissipation ³	Po	15.6	Watts
Thermal Resistance Junction to Case	θ _{JC}	1	°C/W
Operating Case Temperature Range Conducting Non-conducting	T _{CASE}	- 40 to 134 - 40 to 100	°C ℃
Storage Temperature Range	T _{STG}	-65 to 150	°C

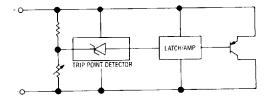
- (1) Kelvin connections required.
- (2) For sinusoidal current duration of 8.3mS maximum.
- $^{(3)}$ For operation above $T_{\text{CASE}} = 134^{\circ}\text{C}, \text{ derate } (\alpha/1)\text{W}/^{\circ}\text{C}.$

DEVICE SELECTION GUIDE

DEVICE	NOM SUPPLY Voltage (Volts)	TRIP POINT VOLTAGE* (VOLTS)
L-6-0V-5	5	6.6 ± 0.2
L-6-0V-12	12	13.7 ± 0.4
L-6-0V-15	15	17.0 ± 0.5
L-6-0V-24	24	27.3 + 0.8

^{*}Trip point voltage tolerance specified over a temperature range of 0°C to

BLOCK DIAGRAM

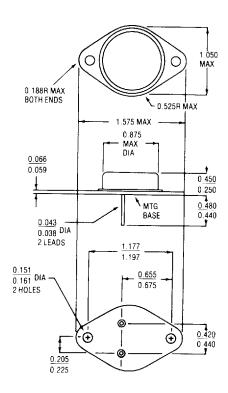


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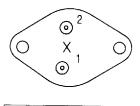
L-6-QV

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DEVICE OUTLINE



Bottom View



1 – N/C 2 – Positive Input Case is Negative Input

NOTE: Case temperature measured at point X. All dimensions are in inches.

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