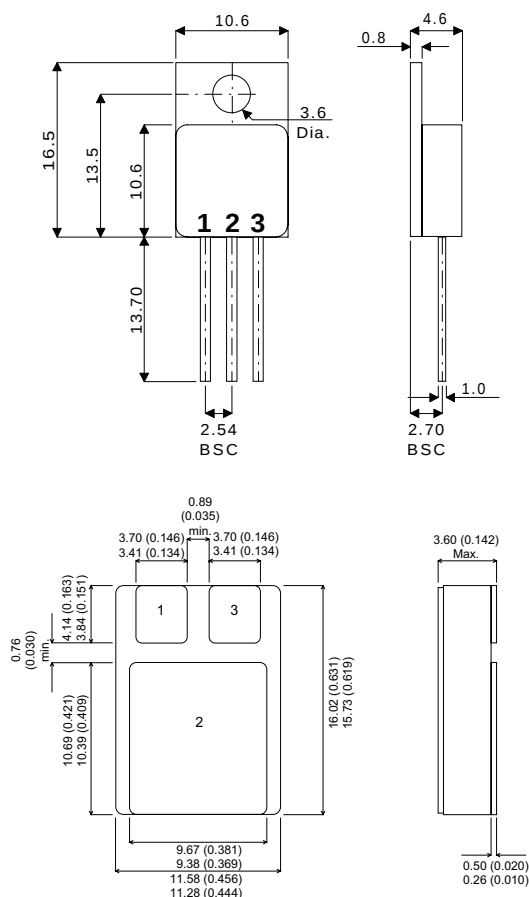


MECHANICAL DATA

Dimensions in mm

8 VOLT POSITIVE VOLTAGE REGULATOR



PIN 1 - Input PIN 2 - Ground PIN 3 - Output

TO220M - TO220 Metal Package - Isolated
SMD1 - Ceramic Surface Mount Package
 Also available in TO39 Package.

FEATURES

- HERMETIC TO220 METAL OR CERAMIC SURFACE MOUNT PACKAGES
- SCREENING OPTIONS AVAILABLE
- ALL LEADS ISOLATED FROM CASE (METAL PACKAGE)
- 8 VOLT REGULATOR
- OUTPUT CURRENT UP TO 1.5A
- THERMAL OVERLOAD PROTECTION
- SHORT CIRCUIT PROTECTION
- OUTPUT TRANSISTOR SOA PROTECTION

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_i	DC Input Voltage	35V
I_o	Output Current	Internally limited
P_D	Power Dissipation	Internally limited
T_j	Junction Temperature	150°C
T_{stg}	Storage Temperature	-65 to 150°C

ELECTRICAL CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$ unless stated)

OUTPUT VOLTAGE			8			
INPUT VOLTAGE (unless otherwise specified)			14			
Parameter		Test Conditions	Min.	Typ.	Max.	Unit
V _O Output Voltage	T _j = 25°C		7.7	8	8.3	V
	I _O = 5mA to 1A P _O ≤ 15W		7.6	8 (V _i = 11.6 to 23V)	8.4	
ΔV _O Line Regulation	T _j = 25°C		80 (V _i = 10.5 to 25V)			mV
			40 (V _i = 11 to 17V)			
ΔV _O Load Regulation	I _O = 5mA to 1.5A T _j = 25°C		100			mV
	I _O = 250 to 750 mA T _j = 25°C		50			
I _d Quiescent Current	T _j = 25°C		8			mA
ΔI _d Quiescent Current Change	I _O = 5mA to 1A		0.5			mA
			1 (V _i = 11.5 to 25V)			
$\frac{\Delta V_O}{\Delta T}$ Output Voltage Drift	I _O = 5mA		−1			mV / °C
e _N Output Noise Voltage	B = 10Hz to 100kHz T _j = 25°C		40			μV
SVR Supply Voltage Rejection	f = 100Hz		62 (V _i = 11.5 to 21.5V)			dB
V _d Dropout Voltage	I _O = 1A T _j = 25°C ΔV _O = 100mV		2			V
I _{sc} Short Circuit Current	V _I = 35V T _j = 25°C		750			mA
I _{scp} Short Circuit Peak Current	T _j = 25°C		2.2			A

THERMAL DATA

$R_{\text{THj-case}}$	Thermal Resistance Junction – Case	Max. $3^{\circ}\text{C} / \text{W}$
$R_{\text{THj-amb}}$	Thermal Resistance Junction – Ambient	Max. $50^{\circ}\text{C} / \text{W}$