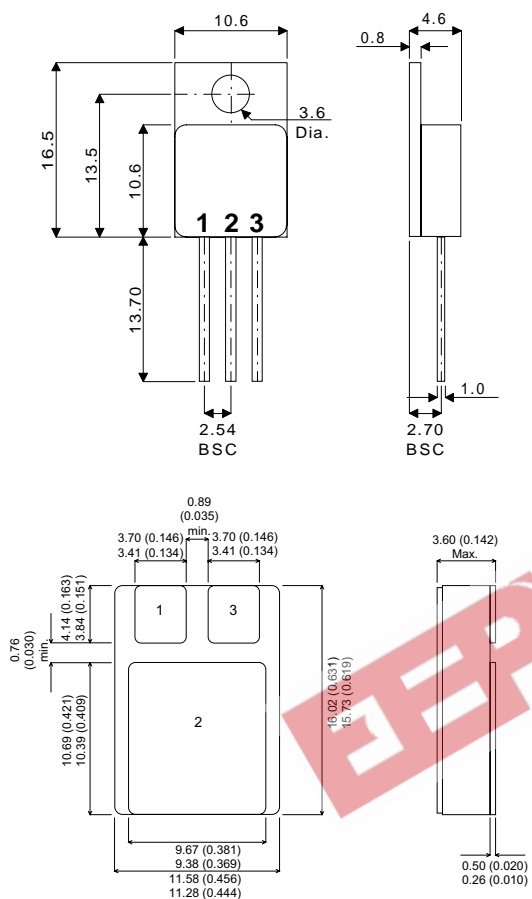


MECHANICAL DATA

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	$T_j = 25^{\circ}\text{C}$	7.7	8	8.3	V	
	$I_O = 5\text{mA to } 1\text{A}$ $P_O \leq 15\text{W}$	7.6	8 ($V_i = 11.6$ to 23V)	8.4		
ΔV_O Line Regulation	$T_j = 25^{\circ}\text{C}$	$(V_i = 10.5$ to $25\text{V})$			80	mV
		$(V_i = 11$ to $17\text{V})$			40	
ΔV_O Load Regulation	$I_O = 5\text{mA to } 1.5\text{A}$ $T_j = 25^{\circ}\text{C}$				100	mV
	$I_O = 250$ to 750 mA $T_j = 25^{\circ}\text{C}$				50	
I_d Quiescent Current	$T_j = 25^{\circ}\text{C}$				8	mA
ΔI_d Quiescent Current Change	$I_O = 5\text{mA to } 1\text{A}$				0.5	mA
		$(V_i = 11.5$ to $25\text{V})$			1	
$\frac{\Delta V_O}{\Delta T}$ Output Voltage Drift	$I_O = 5\text{mA}$				-1	mV / $^{\circ}\text{C}$
e_N Output Noise Voltage	$B = 10\text{Hz to } 100\text{kHz}$ $T_j = 25^{\circ}\text{C}$				40	μV
SVR Supply Voltage Rejection	$f = 100\text{Hz}$	62			dB	
		$(V_i = 11.5$ to $21.5\text{V})$				
V_d Dropout Voltage	$I_O = 1\text{A}$ $T_j = 25^{\circ}\text{C}$ $\Delta V_O = 100\text{mV}$				2	V
I_{sc} Short Circuit Current	$V_i = 35\text{V}$ $T_j = 25^{\circ}\text{C}$				750	mA
I_{scp} Short Circuit Peak Current	$T_j = 25^{\circ}\text{C}$				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. $50^{\circ}\text{C} / \text{W}$