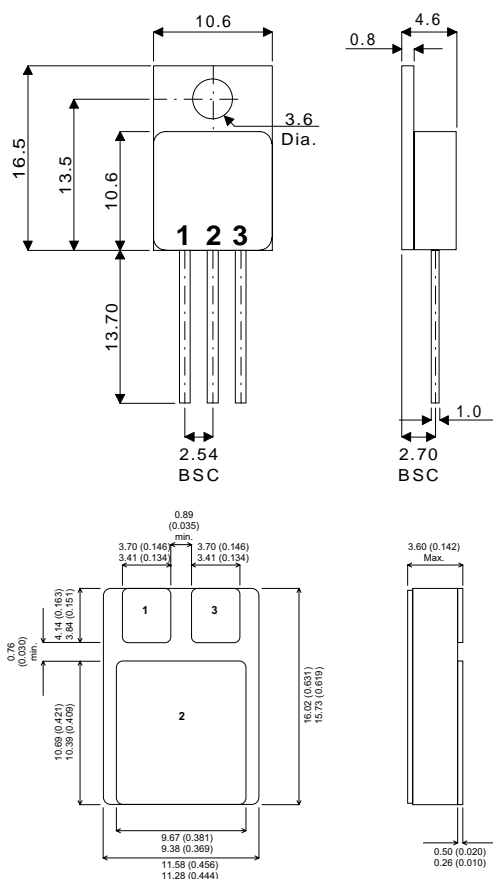


**MECHANICAL DATA**

Dimensions in mm



Pin 1 - Adjust

Pin 2 - Output

Pin 3 - Input

**TO220M**

-TO220 Metal Package - Isolated

**SMD1**

- SMD1 Ceramic Surface Mount Package

**POSITIVE ADJUSTABLE  
VOLTAGE REGULATOR IN  
TO 220 METAL AND  
CERAMIC SURFACE MOUNT  
PACKAGES**

**FEATURES**

- HERMETIC TO220 METAL OR CERAMIC SURFACE MOUNT PACKAGES
- SCREENING OPTIONS AVAILABLE
- ALL LEADS ISOLATED FROM CASE(METAL PACKAGE)
- OUTPUT VOLTAGE RANGE OF 1.25 TO 37V (1.25 TO 57V FOR -HV VERSION)
- OUTPUT CURRENT IN EXCESS OF 1.5A
- 0.1% LINE AND LOAD REGULATION
- FLOATING OPERATION FOR HIGH VOLTAGES
- COMPLETE SERIES OF PROTECTIONS:
  - CURRENT LIMITING
  - THERMAL SHUTDOWN
  - SOA CONTROL
  - 1% VOLTAGE TOLERANCE OPTION

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

$V_{I-O}$	Input - Output Differential Voltage	– Standard – HV Series	40V 60V
$I_O$	Output Current		Internally limited
$P_D$	Power Dissipation		Internally limited
$T_j$	Operating Junction Temperature Range		-55 to 150°C
$T_{stg}$	Storage Temperature		-65 to 150°C

**ELECTRICAL CHARACTERISTICS** ( $V_I - V_O = 5V$ ,  $I_O = 500mA$ , unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit.	
$\Delta V_O$ Line Regulation	$V_I - V_O = 3$ to 40V		$T_j = 25^\circ C$	0.01	0.02	% / V
				0.02	0.05	
$\Delta V_O$ Load Regulation	$V_O \leq 5V$ $I_O = 10mA$ to 1.5 A		$T_j = 25^\circ C$	5	15	mV
				20	50	
	$V_O \geq 5V$ $I_O = 10mA$ to 1.5A		$T_j = 25^\circ C$	0.1	0.3	%
				0.3	1	
$I_{ADJ}$ Adjust Pin Current				50	100	$\mu A$
$\Delta I_{ADJ}$ Adjust Pin Current Change	$V_I - V_O = 2.5$ to 40V $I_O = 10mA$ to 1.5A			0.2	5	$\mu A$
$V_{REF}$ Reference Voltage (between pin 3 and pin 1)	$V_I - V_O = 3$ to 40V $I_O = 10mA$ to 1.5A	1.2	1.25	1.3	V	
$\frac{\Delta V_O}{V_O}$ Output Voltage Temperature Stability			1		%	
$I_{O(min)}$ Minimum Load Current	$V_O - V_O = 40V$		3.5	5	mA	
$I_{O(max)}$ Maximum Load Current	$V_I - V_O \leq 15V$	1.5	2.2		A	
	$V_I - V_O = 40V$		0.4			
$e_N$ Output Noise (percentage of $V_O$ )	$T_j = 25^\circ C$ , 10Hz to 10kHz		0.003		%	
SVR Supply Voltage Rejection (*)	$T_j = 25^\circ C$ $f = 100Hz$	$C_{ADJ} = 0$		65	dB	
		$C_{ADJ} = 10\mu F$	66	80		

(\*)  $C_{ADJ}$  is connected between pin 1 and ground.

**THERMAL DATA**

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