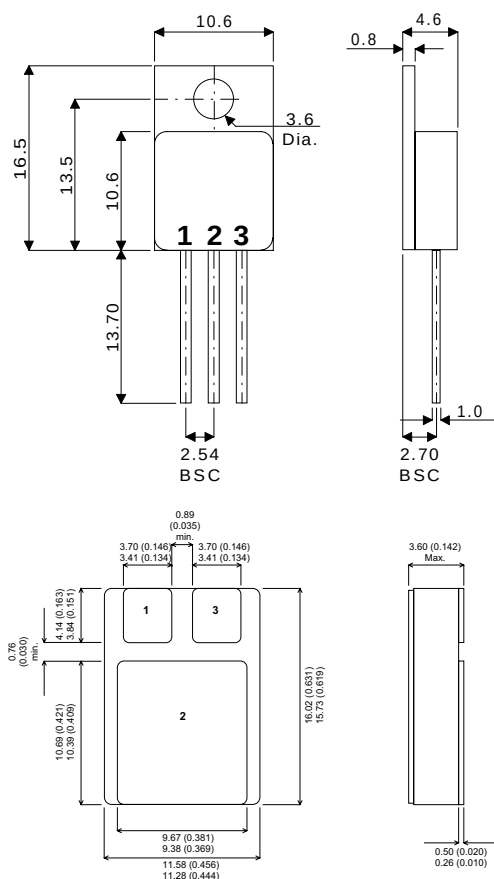


MECHANICAL DATA

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	40V
		– HV Series	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.
ΔV_O Line Regulation	$V_I - V_O = 3 \text{ to } 40V$	$T_j = 25^\circ C$		0.01	0.02	% / V
				0.02	0.05	
ΔV_O Load Regulation	$V_O \leq 5V$	$T_j = 25^\circ C$		5	15	mV
	$I_O = 10mA \text{ to } 1.5 A$			20	50	
	$V_O \geq 5V$	$T_j = 25^\circ C$		0.1	0.3	%
	$I_O = 10mA \text{ to } 1.5A$			0.3	1	
I_{ADJ} Adjust Pin Current				50	100	μA
ΔI_{ADJ} Adjust Pin Current Change	$V_I - V_O = 2.5 \text{ to } 40V$ $I_O = 10mA \text{ to } 1.5A$			0.2	5	μA
V_{REF} Reference Voltage (between pin 3 and pin 1)	$V_I - V_O = 3 \text{ to } 40V$ $I_O = 10mA \text{ to } 1.5A$		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. $50^\circ C / W$

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