NEW ENGLAND SEMICONDUCTOR

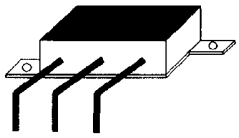
NSG2585

LINEAR VOLTAGE REGULATORS

3 TERMINAL NEGATIVE ADJUSTABLE

- Output Voltage Adjustable Form -1.2V to -37V
- 1.5A Output Current Guaranteed -55°C to +150°C
- Line Regulation Typically 0.01% /V
- Load Regulation Typically 0.3%
- Output Short Circuit Protected

	Pinout
Pin 1	Adjust
Pin 2	Input
Pin 3	Output
Tab	Isolated

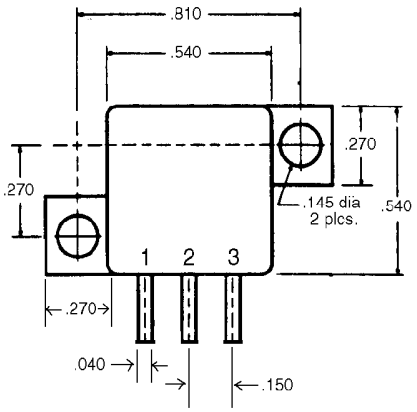


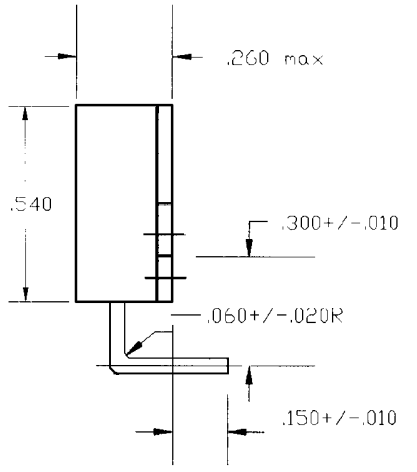
TO-254Z

Absolute Maximum Ratings

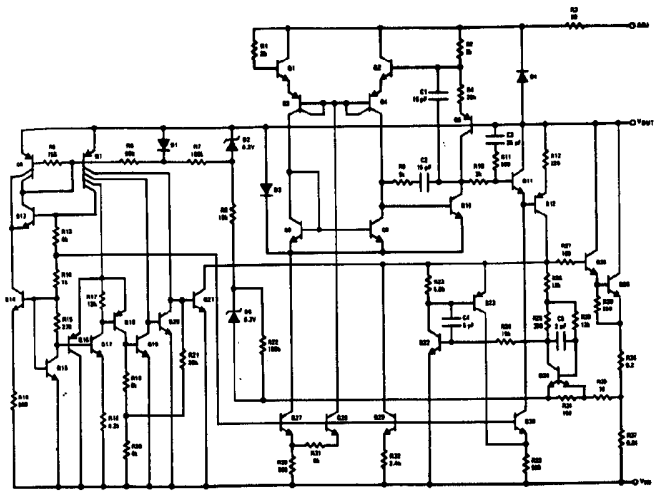
Power Dissipation	Internally Limited
Input-Output Voltage Differential	40V
Operating Junction Temperature Range	
NSG2585	-55°C to +150°C
Storage Temperature	-65°C to +150°C
Lead Temperature (Soldering, 10 sec.)	300°C
ESD Rating	2k Volts

MECHANICAL OUTLINE





Schematic Diagram



NEW ENGLAND SEMICONDUCTOR
6 Lake Street Lawrence, MA 01841
1-800-446-1158 / (978) 794-1666 / FAX: (978) 689-0803

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NSG2585

Electrical Characteristics

Parameter	Conditions	NSG2585 Min	NSG2585 Typ	NSG2585 Max	Units
Line Regulation	$T_j = 25^0C$, $3V \le \lvert V_{IN} - V_{OUT} \rvert \le 40V$ $I_L = 10$ mA		0.01	0.02	%/V
Load Regulation	$T_j = 25^0C$, $10mA \le I_{OUT} \le I_{MAX}$		0.3	0.5	%
Thermal Regulation	$T_j = 25^0C$, 10ms Pulse		0.002	0.02	%/W
Adjustment Pin Current Charge	$10\ mA \le I_L \le I_{MAX}$ $3.0V \le \lvert V_{IN} - V_{OUT} \rvert \le 40V$, $T_A = 25^0C$		2	5	µA
Adjustment Pin Current			65	100	µA
Reference Voltage	$T_j = 25^0C$ $3V \le \lvert V_{IN} - V_{OUT} \rvert \le 40V$, $10\ mA \le I_{OUT} \le I_{MAX}$, $P \le P_{MAX}$	-1.225 -1.200	-1.250 -1.250	-1.275 -1.300	V V
Line Regulation	$3V \le \lvert V_{IN} - V_{OUT} \rvert \le 40V$		0.02	0.05	%/V
Load Regulation	$10\ mA \le I_{OUT} \le I_{MAX}$		0.3	1	%
Temperature Stability	$T_{MIN} \le T_j \le T_{MAX}$		0.6		%
Minimum Load Current	$\lvert V_{IN} - V_{OUT} \rvert \le 40V$ $\lvert V_{IN} - V_{OUT} \rvert \le 10V$		2.5 1.2	5 3	mA mA
Current Limit	$\lvert V_{IN} - V_{OUT} \rvert \le 15V$ K and T Package H and P Package $\lvert V_{IN} - V_{OUT} \rvert = 40V$, $T_j = 25^0C$ K and T Package H and P Package	 1.5 0.5 0.24 0.15	 2.2 0.8 0.4 0.17	 3.5 1.8 	 A A A A
RMS Output Noise, % of V_{OUT}	$T_J = 25^0C$, 10 Hz ≤ f ≤ 10 kHz		0.003		%
Ripple Rejection Ratio	$V_{OUT} = -10V$, f = 120 Hz $C_{ADJ} = 10\ \mu F$	 66	60 77		dB dB
Long-Term Stability	$T_j = 125^0C$, 1000 Hours		0.3	1	%

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