



PRELIMINARY

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

Designer's Data Sheet

FEATURES:

- Eutectic Die Attach, Hermetic Package
- Superior to LM137 types
- Complimentary use with LM117 types
- Fast Switching

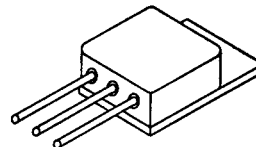
APPLICATIONS

- Wide Range Power Supplies
- Constant Current Supplies
- Voltage Programmable Supplies

SVR137KM

**-1.5 AMPS
-40 VOLTS
NEGATIVE ADJUSTABLE
LINEAR VOLTAGE REGULATOR**

TO-254

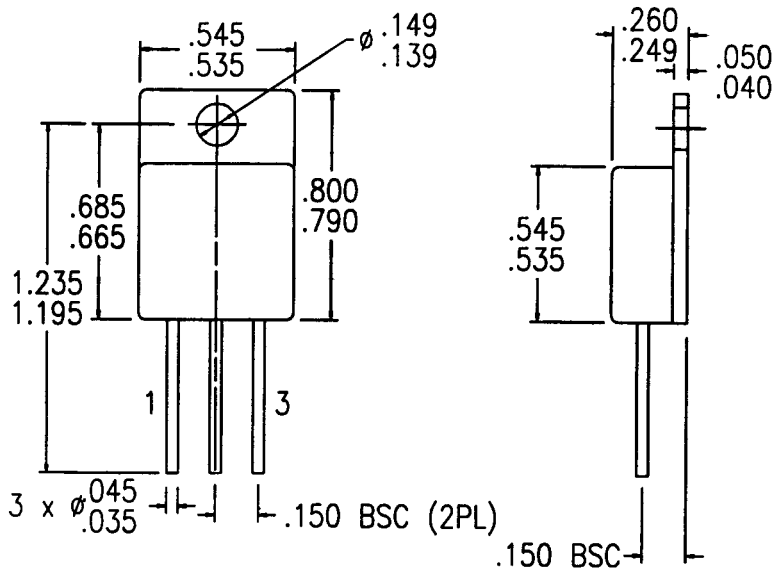


MAXIMUM RATINGS

CHARACTERISTIC	SYMBOL	VALUE	UNIT
Current Load	I _{OUT}	1.5	Amps
Input to Output Differential	V _{in} -V _{out}	40	Volts
Power Dissipation (Internally Limited)	P _D	20	Watts
Storage Temperature Range	T _{stg}	-65 to +150	°C
Operation Junction Temperature	T _J	-55 to +150	°C
Thermal Resistance Junction to Case	R _{θJC}	4.5	°C/Watts

PACKAGE OUTLINE: TO-254

PIN OUT:
PIN 1: ADJ
PIN 2: IN
PIN 3: OUT



NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: LA0007 A

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ELECTRICAL CHARACTERISTICS @ $T_J=25^\circ\text{C}$ (Unless Otherwise Specified)

RATING	SYMBOL	MIN	TYP	MAX	UNIT
Reference Voltage $I_{OUT} = 10\text{mA}$, $T_A=25^\circ\text{C}$ $3.7\text{ V} \leq (V_{in} - V_{out}) \leq 40\text{ V}$, $P \leq P_{max}$ $10\text{mA} \leq I_{OUT} \leq I_{max}$	VREF	1.238 1.22	1.25 1.25	1.262 1.28	V
Line Regulation $3.7\text{ V} \leq (V_{in} - V_{out}) \leq 40\text{ V}$, $I_L=10\text{mA}$ $T_A=25^\circ\text{C}$ $T_A=T_{min}$ to T_{max}	$\frac{\Delta V_{out}}{\Delta V_{in}}$		0.005 0.01	0.01 0.02	%/V
Load Regulation $10\text{mA} < I_{out} < I_{max}$ $V_{out} < 5\text{V}$, $T_A=25^\circ\text{C}$ $V_{out} > 5\text{V}$, $T_A=25^\circ\text{C}$ $V_{out} < 5\text{V}$ $V_{out} > 5\text{V}$	$\frac{\Delta V_{out}}{\Delta I_{out}}$		5 0.1 20 0.2	25 0.5 50 1	mV % mV %
Thermal Regulation $T_A=25^\circ\text{C}$, 20ms pulse			.002	0.02	%/W
Ripple Rejection $V_{out} = 10\text{V}$, $f=120\text{ MHz}$ $C_{adj} = 1\mu\text{F}$, $T_A=25^\circ\text{C}$ $C_{adj} = 10\mu\text{F}$		60 70	66 80		dB
Adjust Pin Current	IADJ		65	100	μA
Adjust Pin Current Change $10\text{mA} < I_{out} < I_{max}$, $3.2\text{V} < (V_{in}-V_{out}) < 40\text{ V}$	$\Delta IADJ$		1	5	μA
Minimum Load Current $(V_{in}-V_{out}) = 40\text{ V}$	Imin		2.5	5	mA
Temperature Stability	$\frac{\Delta V_{out}}{\Delta T_{emp}}$		0.6	1.5	%
Long Term Stability $T_A=125^\circ\text{C}$	$\frac{\Delta V_{out}}{\Delta V_{time}}$		0.3	1	%
RMS Output Noise (% of V_{out}) $T_A=25^\circ\text{C}$, $10\text{Hz} < f < 10\text{KHz}$	en		0.003		%

For thermal derating curves and other characteristic curves please contact SSDI Marketing Department.