

Features

- Internal Thermal Overload Protection
- Internal Short Circuit Current Limiting
- No External Components Required
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

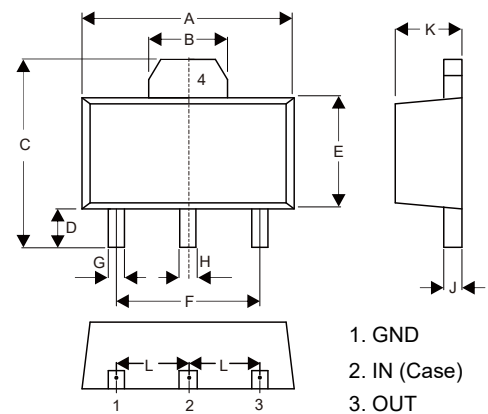
Maximum Ratings

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-30	V
Maximum Output Current	I_o	0.1	A
Operating Junction Temperature Range	T_{opr}	-30~75	°C
Storage Temperature Range	T_{STG}	-40~125	°C

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Three-Terminal Low Current Negative Voltage Regulators

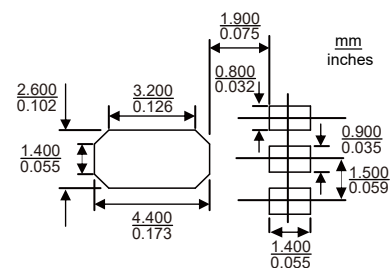
SOT-89



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.169	0.185	4.30	4.70	
B	0.061		1.55		TYP.
C	0.154	0.171	3.91	4.35	
D	0.031	0.047	0.80	1.20	
E	0.089	0.104	2.25	2.65	
F	0.118		3.00		TYP.
G	0.013	0.020	0.33	0.52	
H	0.015	0.021	0.38	0.53	
J	0.014	0.017	0.35	0.44	
K	0.055	0.063	1.40	1.60	
L	0.059		1.50		TYP.

Suggested Solder Pad Layout



Electrical Characteristics

($V_i=14V$, $I_o=40mA$, $0^\circ C < T_j < 125^\circ C$, $C_i=0.33\mu F$, $C_o=0.1\mu F$, Unless Otherwise Specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Output Voltage	V_o	$V_i=-14V$, $I_o=40mA$	-7.68	-8.0	-8.32	V
Load Regulation	V_o-I_o	$I_o=1mA-100mA$, $V_i=-14V$	-	10	80	mV
Line Regulation	V_o-V_i	$-10.5V \leq V_i \leq -23V$, $I_o=40mA$	-	24	175	mV
Quiescent Current	I_q	$V_i=-14V$, $I_o=40mA$	-	3.5	6.0	mA
Output Noise Voltage	V_N	$10Hz \leq f \leq 100KHz$ $V_i=-14V$, $I_o=40mA$	-	190	-	μV
Ripple Rejection	RR	$-11V \leq V_i \leq -21V$, $I_o=40mA$ $f=120Hz$, $T_j=25^\circ C$ $e_{iN}=1V_{P-P}$	39	68	-	dB

Typical Application

