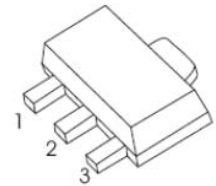


Features

- Low Current (Max. 50mA)
- High Voltage (Max. 300V)
- Video Output Stages



SOT-89-3L

Absolute Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	300	V
Collector-Emitter Voltage	V_{CEO}	300	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current -Continuous	I_C	50	mA
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_J	-55 to 150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 to 150	$^{\circ}\text{C}$

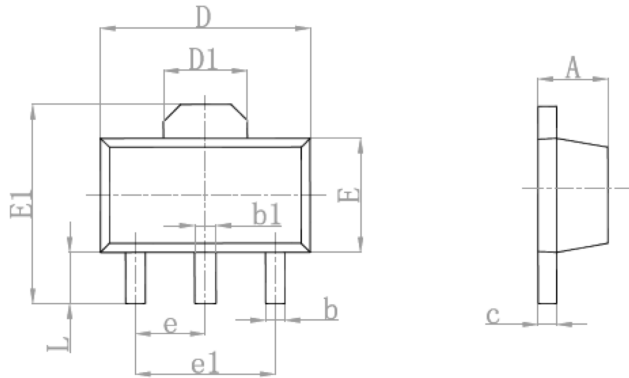
1. BASE
2. COLLECTOR
3. EMITTER

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base Breakdown Voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	300	--	--	V
Collector-emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, I_B=0$	300	--	--	V
Emitter-base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5	--	--	V
Collector Cut-off Current	I_{CBO}	$V_{CB}=200\text{V}, I_E=0$	--	--	10	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$	--	--	50	nA
DC Current Gain	h_{FE}	$V_{CE}=20\text{V}, I_C=25\text{mA}$	50	--	--	--
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=30\text{mA}, I_B=5\text{mA}$	--	--	0.6	V
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	60	--	--	MHz

Package Outline Dimensions

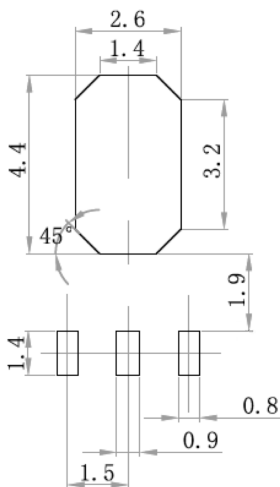
SOT-89-3L



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

Suggested Pad Layout

SOT-89-3L



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.