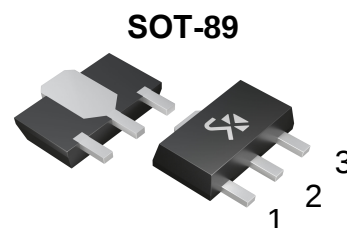


PNP Silicon Epitaxial Planar Transistor

Features

- World standard micro packaging: SOT-89
- high collector base voltage: $V_{CB0} > -100V$ excellent DC current gain linearity.



1base 2collector 3emitter

MAXIMUM RATINGS ($T_A = 25^\circ C$ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CB0}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.0	A
I_C	Collector Current -Continuous (Pulse) *	-1.0	A
P_C	Collector Power Dissipation	2	W
T_j	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature	-55-150	$^\circ C$

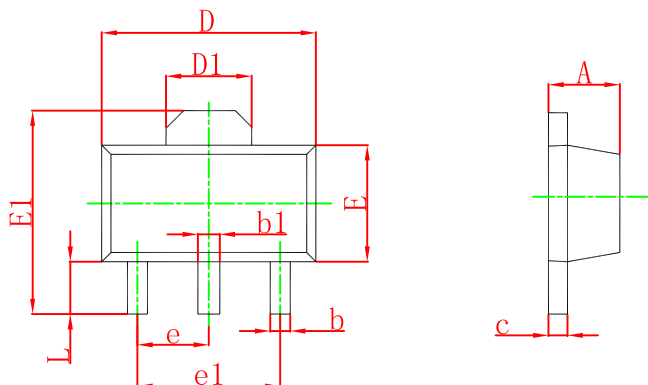
ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Base emitter voltage*	V_{BE}	$V_{CE} = -10V, I_C = -10mA$	-600	-640	-700	mV
Collector cut-off current	I_{CBO}	$V_{CB} = -100V, I_E = 0$			-100	nA
Collector cut-off current	I_{EBO}	$V_{EB} = -5V, I_E = 0$			-100	uA
DC current gain	h_{FE}	$V_{CE} = -2V, I_C = -100mA$ $V_{CE} = -2V, I_C = -500mA$	90 25	200 80	400	
Collector-emitter saturation voltage	$V_{CE}(Sat)$	$I_C = -500mA, I_B = -50mA$		-0.29	-0.5	V
Base saturation voltage*	$V_{BE}(Sat)$	$I_C = -500mA, I_B = -50mA$		-0.9	-1.5	V
Transition frequency	f_T	$V_{CE} = -5V, I_E = 10mA$		80		MHz
output capacitance	C_{Ob}	$V_{CE} = -10V, I_E = 0mA, f = 1.0MHz$		26		pF

h_{FE} Classification

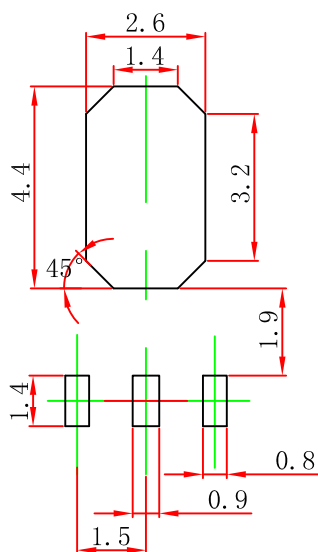
Marking	AW	AV	AU
h_{FE}	90-180	135-270	200-400

SOT-89 Package Outline Dimensions



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

SOT-89 Suggested Pad Layout



Note:

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