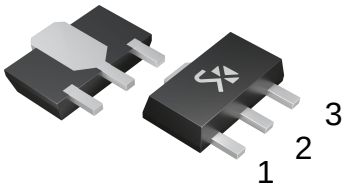
時科 SHIKUES

2SB1115

PNP Silicon Epitaxial Planar Transistor

SOT-89



1base 2collector 3emitter

Features

- **World standard micro packaging.**
- **Low VCE (sat): VCE (sat)=-0.2V at 1A**

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current -Continuous	-1.0	A
I_C	Collector Current -Continuous（Pulse）*	-2.0	A
P_C	Collector Power Dissipation	2	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

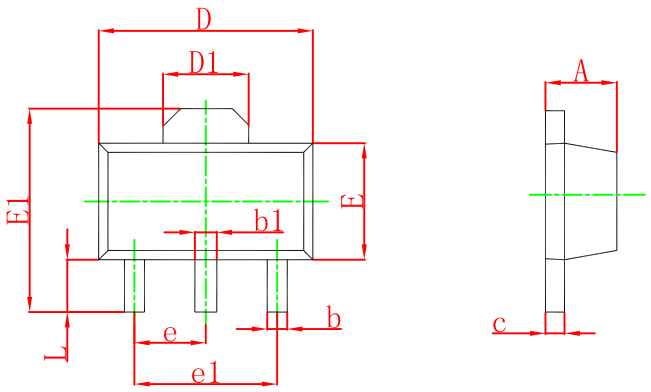
ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Base emitter voltage*	V_{BE}	V_{CE}=-2V, I_C=-10mA	-600		-700	mV
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0			-100	nA
Collector cut-off current	I_{EBO}	V_{EB}=-6V, I_C=0			-100	uA
DC current gain	h_{FE}	V_{CE}=-2V, I_C=-100mA V_{CE}=-2V, I_C=-1A	135 100	340 200	600	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=-1A, I_B=-50mA		-0.2	-0.3	V
Base saturation voltage*	V_{BE}(sat)	I_C=-1A, I_B=-50mA		-0.9	-1.2	V
Transition frequency	f_T	V_{CE}=-2 V,I_E=100mA,	80	120		MHz
output capacitance	C_{Ob}	V_{CE}=-10 V,I_E=0 mA, f=1.0MHz		25		pF

hFE Classification

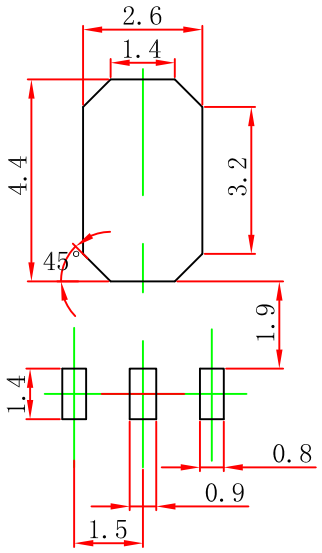
Marking	YM	YL	YK
H_{FE}	135-270	200-400	300-600

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:±0.05mm.
3.The pad layout is for reference purposes only.