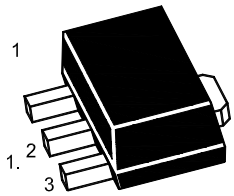
Plastic-Encapsulate Transistors

TRANSISTOR (PNP)



Base 2.Collector 3.Emitter

SOT-89 Plastic Package

FEATURES

- NPN Complement to BC868**U**
- Low Voltage
- High Current

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-32	V
V_{CEO}	Collector-Emitter Voltage	-20	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

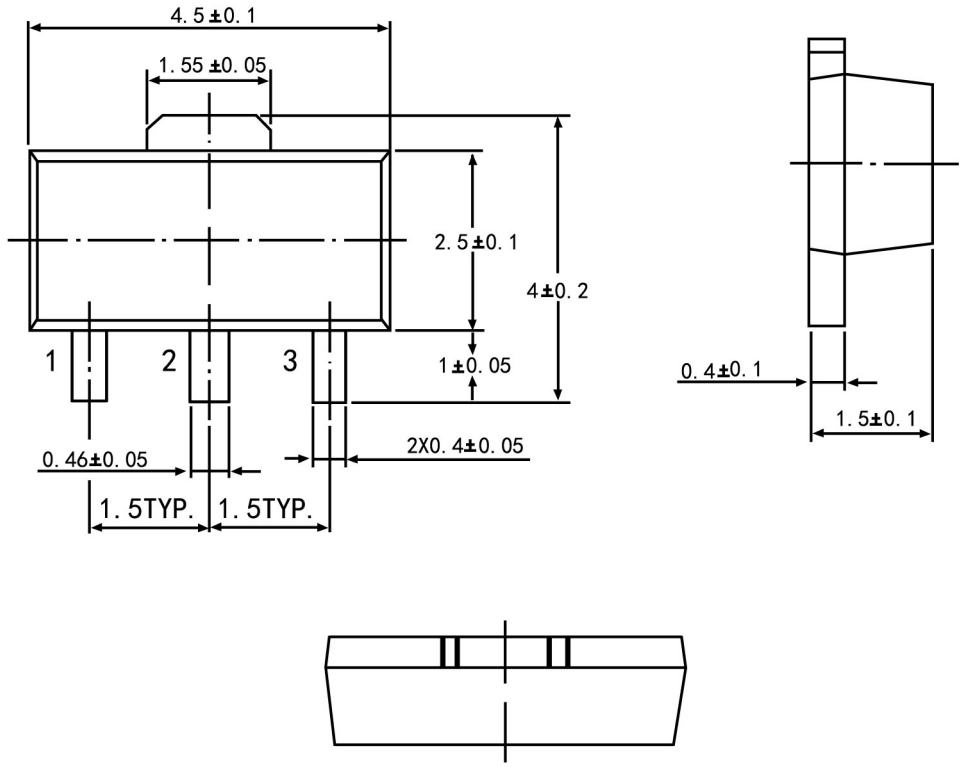
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-32			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-25V,I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-10V, I_C=-5mA	50			
	$h_{FE(2)}$	V_{CE}=-1V, I_C=-0.5A	100		375	
	$h_{FE(3)}$	V_{CE}=-1V, I_C=-1A	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1A,I_B=-0.1A			-0.5	V
Base -emitter voltage	V_{BE}	V_{CE}=-1V, I_C=-1A			-1	V
		V_{CE}=-10V, I_C=-5mA		-0.62		V
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA, f=100MHz	40			MHz

CLASSIFICATION OF $h_{FE(2)}$

RANK	BC869U	BC869-16U	BC869-25U
RANGE	100 – 375	100 – 250	160 – 375
MARKING	CEC	CGC	CHC

SOT-89 PACKAGE OUTLINE



Symbol	Dimension in Millimeters	
	Min	Max
A	1.40	1.60
B	0.44	0.62
B1	0.35	0.54
C	0.35	0.44
D	4.40	4.60
D1	1.62	1.83
E	2.29	2.60
e	1.50 Typ	
H	3.94	4.25
H1	2.63	2.93
L	0.89	1.20
All Dimensions In mm		