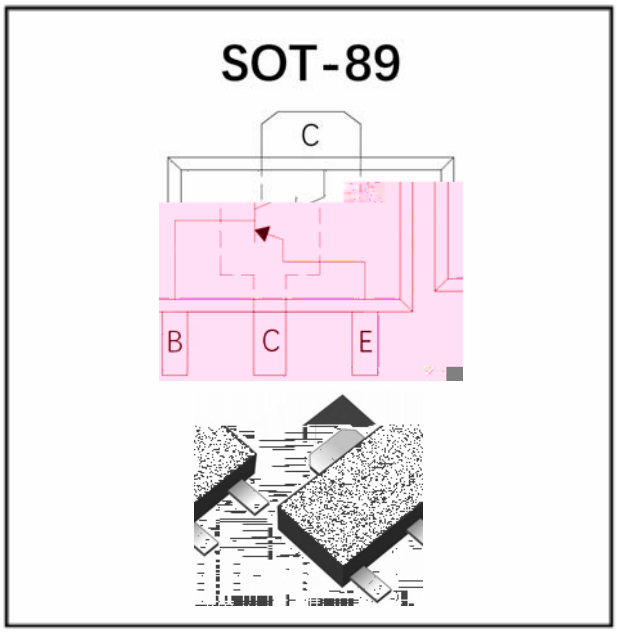
PNP General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix ”HF”
- Moitsure sensitivity level 1
- Low collector-emitter saturation voltage

Mechanical Data

- **Package**: SOT-89

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Marking:

BC869	CEC
BC869-25	CHC

■Maximum Ratings (Ta=25 unless otherwise noted)

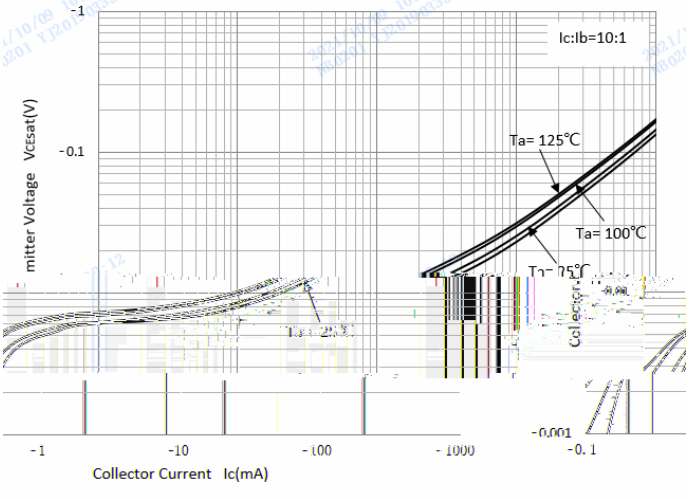
Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	V_{CEO}	V	I_C=-1mA, I_B=0	-20
Minimum Collector-Base Voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-32
Minimum Emitter-Base Voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5
Collector Current	I_C	A		-1
Collector Power Dissipation	P_C	mW		500
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	/W		250
Operation Junction Temperature	T_j			-55 to +150
Storage Temperature	T_{stg}			-55 to +150

■**Electrical Characteristics** (Ta=25 unless otherwise noted)

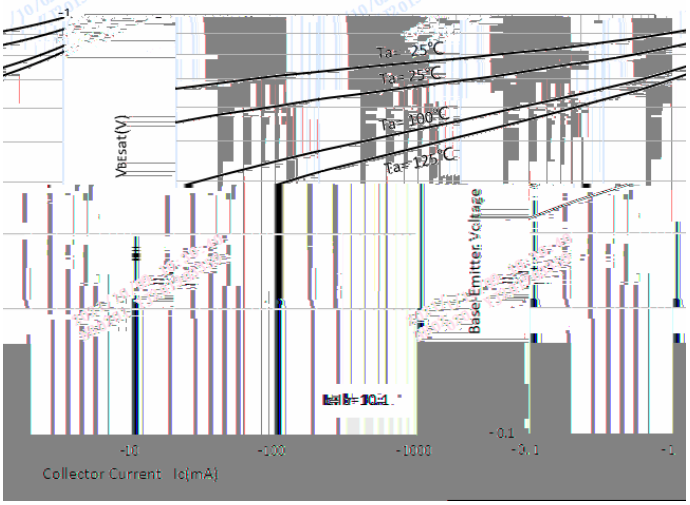
Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-Emitter Voltage	V_{CEO}	V	I_C=-1mA, I_B=0	-20		
Collector-Base Voltage	V_{CBO}	V	I_C=-100uA, I_E=0	-32		
Emitter-Base Voltage	V_{EBO}	V	I_E=-100uA, I_C=0	-5		
Collector-Base cut-off current	I_{CBO}	nA	V_{CB}=-25V			-100
Emitter-Base cut-off current	I_{EB0}	nA	V_{EB}=-5V			-100
DC Current Gain	$h_{FE}1$		V_{CE}=-1V I_C=-5mA	50		
	$h_{FE}2$		V_{CE}=-1V I_C=-500mA	100		375

h

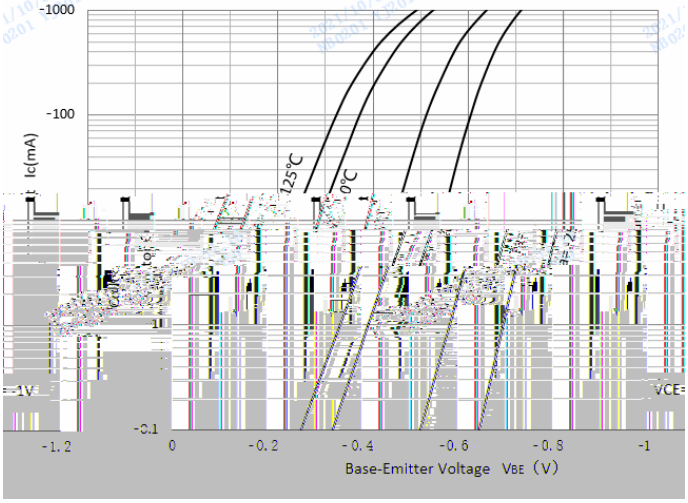
Collector-Emitter Saturation Voltage



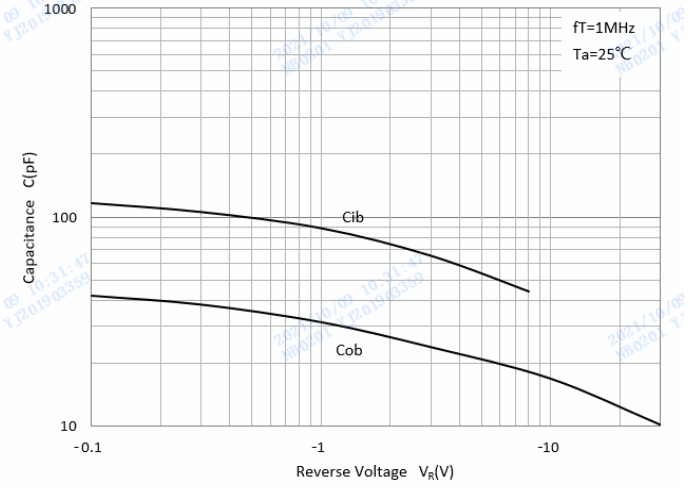
Base-Emitter Saturation Voltage



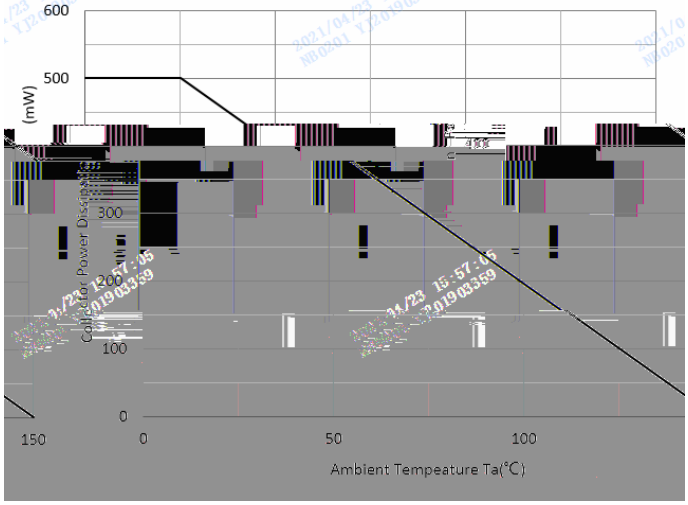
Base-Emitter On Voltage



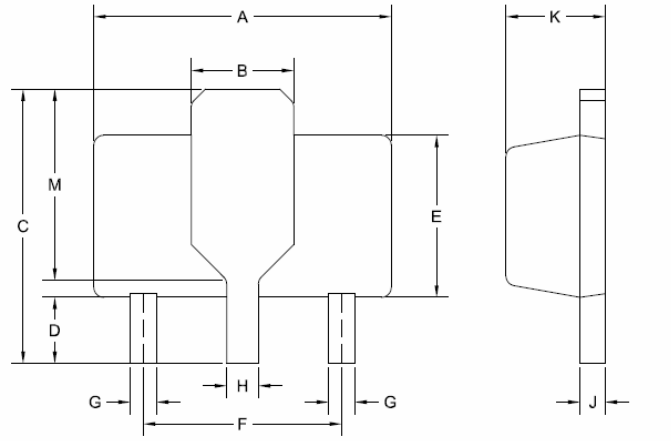
Cob/Cib-V_{CB}/V_{EB}



Collector Power Derating Curve

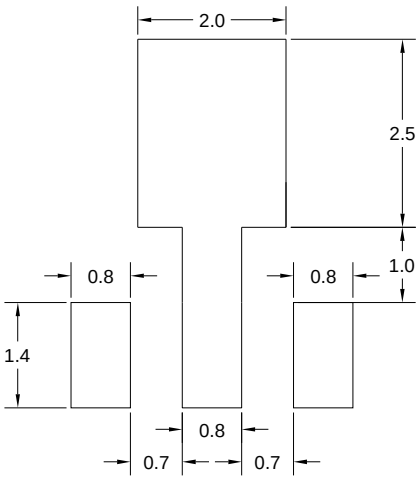


■SOT-89 Package Outline Dimensions



DIM	MM MIN.	MM MAX.	INCHES MIN.	INCHES MAX.
A	4.400	4.600	0.173	0.181
B	1.550 TYP.		0.061 TYP.	
C	3.940	4.250	0.155	0.167
D	0.800	1.200	0.031	0.047
E	2.400	2.600	0.094	0.102
F	3.00 TYP.		0.118 TYP.	
G	0.360	0.480	0.014	0.019
H	0.407	0.440	0.560	0.017
J	0.017	0.350	0.440	0.014
K	0.063	1.400	1.600	0.055
M	0.108 TYP.		2.750 TYP.	

■SOT-89 Suggested Pad Layout



UNIT:MM

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