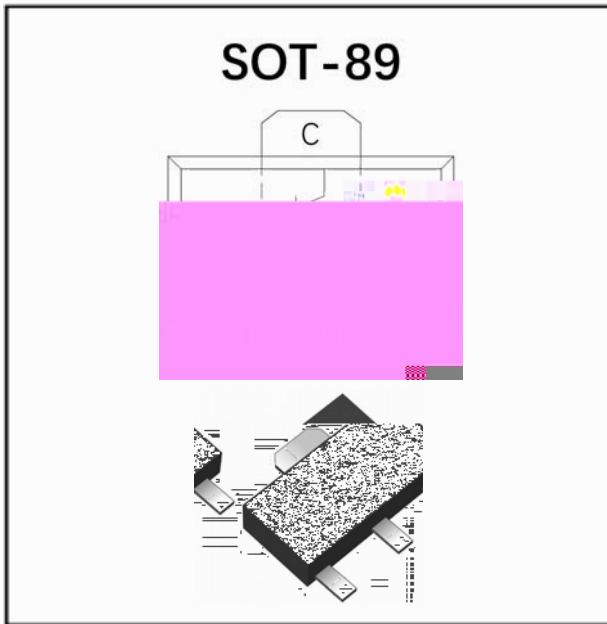


PNP General Purpose Amplifier



Features

- Epoxy meets UL-94 V-0 flammability rating
- Halogen free available upon request by adding suffix "HF"
- Moisture 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:

BCX52	AE
BCX52-16	AM

Maximum Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	V_{CEO}	V	$I_C = -1mA, I_B = 0$	-60
Minimum Collector-Base Voltage	V_{CBO}	V	$I_C = -100\mu A, I_E = 0$	-60
Minimum Emitter-Base Voltage	V_{EBO}	V	$I_E = -100\mu A, I_C = 0$	-5
Collector Current	I_C	A		-1
Collector Power Dissipation	P_C	mW		500
Thermal Resistance From Junction To Ambient	R_{JA}	/W		250
Operation Junction Temperature	T_j			-55 to +150
Storage Temperature	T_{stg}			-55 to +150



BCX52

Electrical Characteristics (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-Emitter Voltage	V_{CEO}	V	$I_C=-1mA, I_B=0$	-60		
Collector-Base Voltage	V_{CBO}	V	$I_C=-100\mu A, I_E=0$	-60		
Emitter-Base Voltage	V_{EBO}	V	$I_E=-100\mu A, I_C=0$	-5		
Collector-Base cut-off current	I_{CBO}	nA	$V_{CB}=-30V$			-100
Emitter-Base cut-off current	I_{EBO}	nA	$V_{EB}=-5V$			-100
DC Current Gain	h_{FE1}		$V_{CE}=-2V, I_C=-150mA$	63		250
	h_{FE2}		$V_{CE}=-2V, I_C=-5mA$	63		
	h_{FE3}		$V_{CE}=-2V, I_C=-500mA$	40		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	V	$I_C=-500mA, I_B=-50mA$			-0.5
Base-Emitter Voltage	V_{BE}	V	$V_{CE}=-2V, I_C=-500mA$			-1
Transition Frequency	f_T	MHz	$I_C=-10mA, V_{CE}=-5V, f=100MHz$		50	

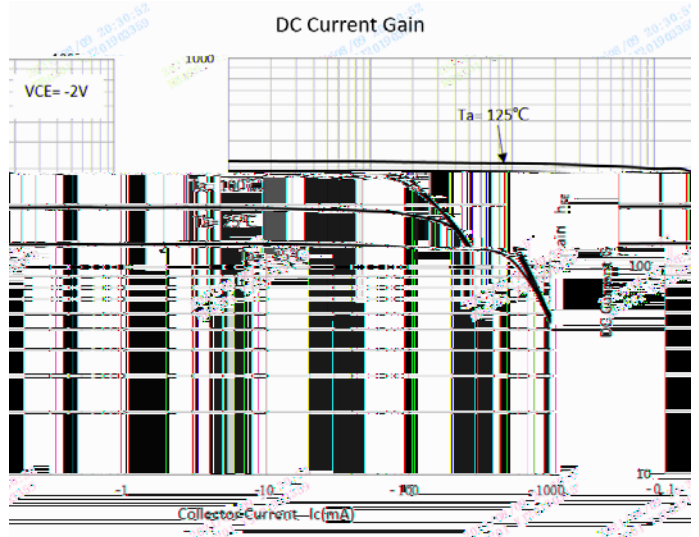
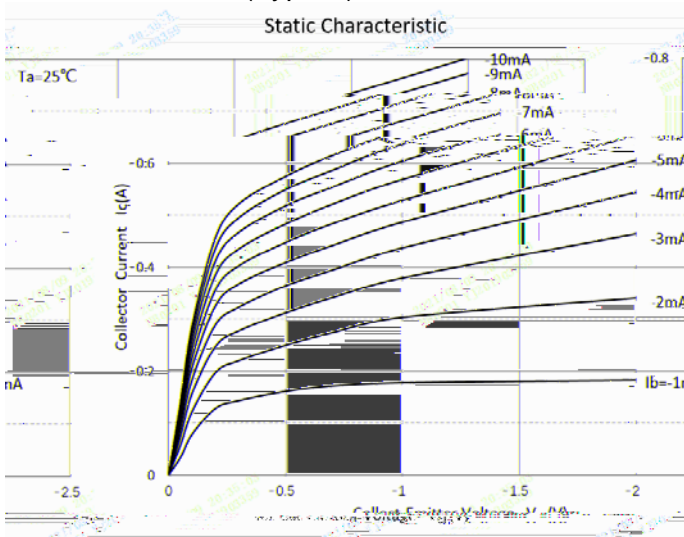
Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BCX52	F2	Approximate 0.055	1000	8000	32000	7" reel

Classification of h_{FE}

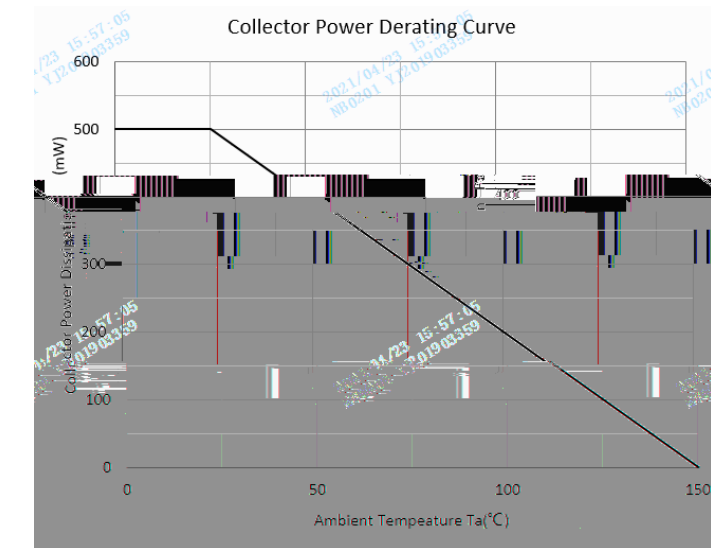
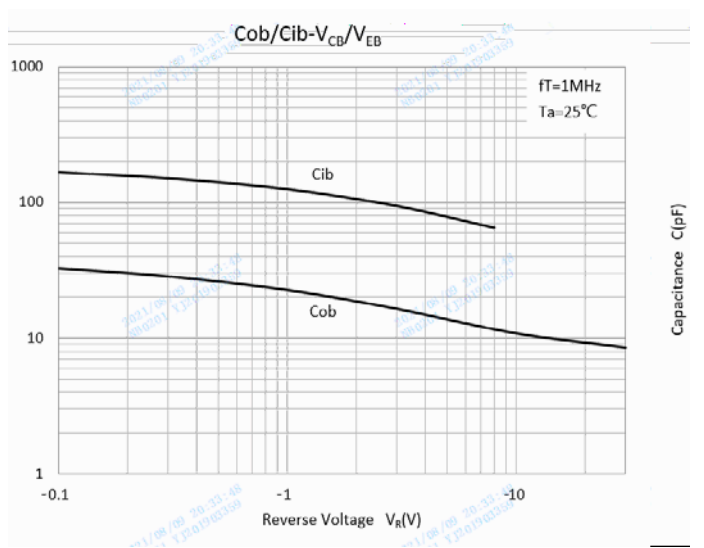
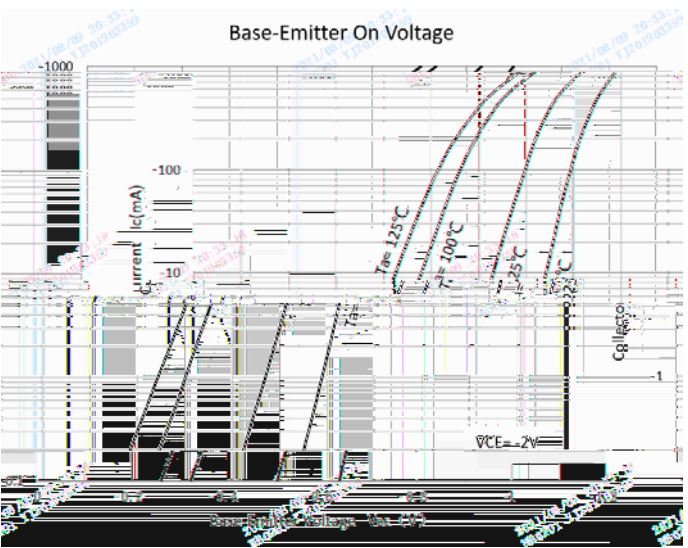
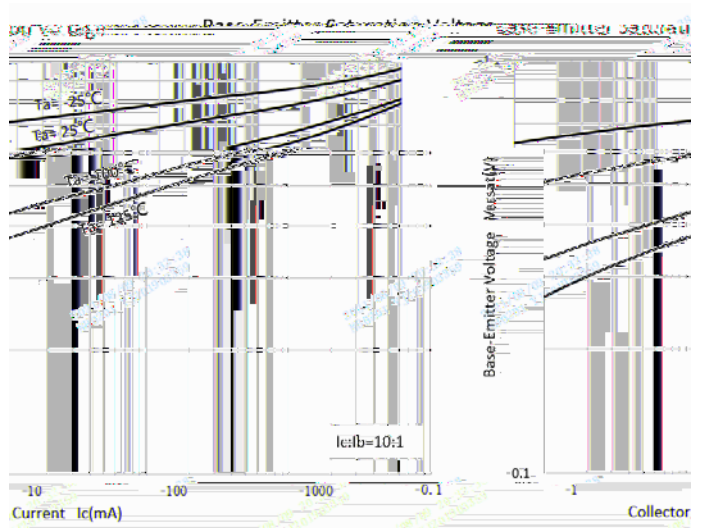
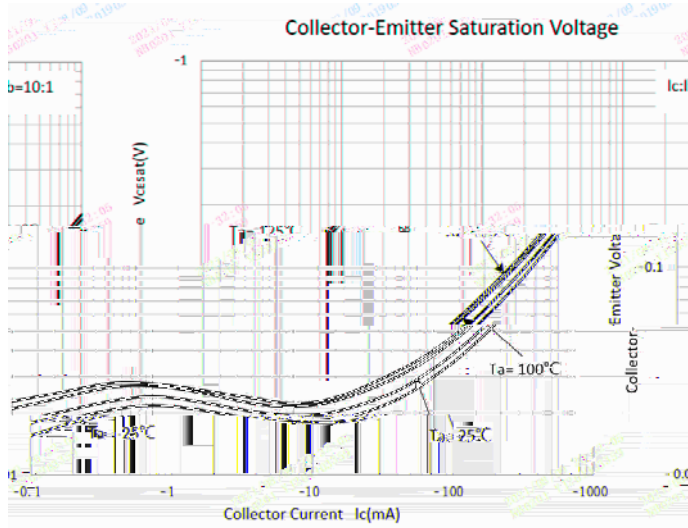
Rank	BCX52	BCX52-16
Range	63-250	100-250

Characteristics (Typical)





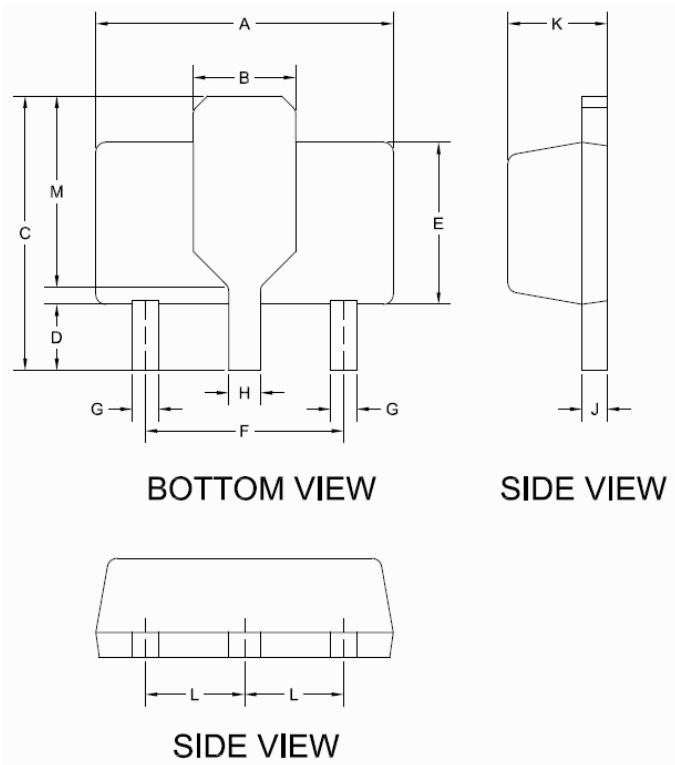
BCX52





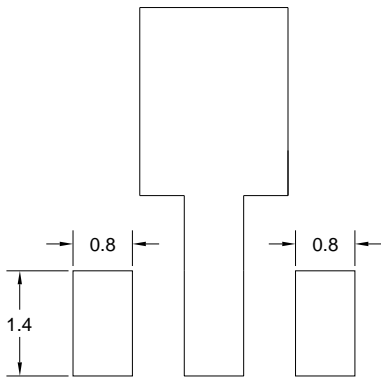
BCX52

SOT-89 Package Outline Dimensions



DIMENSIONS		DIMENSIONS		
1	DIM	INCHES		
		MIN.	MAX.	MIN.
	MAX. A	0.173	0.181	4.400
	TYP. B	0.061 TYP.		1.550
	MAX. C	0.155	0.167	3.940
	MAX. D	0.031	0.047	0.800
	MAX. E	0.094	0.102	2.400
	TYP. F	0.118 TYP.		3.00 T
	MAX. G	0.014	0.019	0.360
	MAX. H	0.560	0.600	0.017
	MAX. J	0.440	0.450	0.014
	MAX. K	1.600	1.650	0.055
	MAX. M	2.750 TYP.		0.108 TYP.

SOT-89 Suggested Pad Layout



UNIT:MM



Disclaimer

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