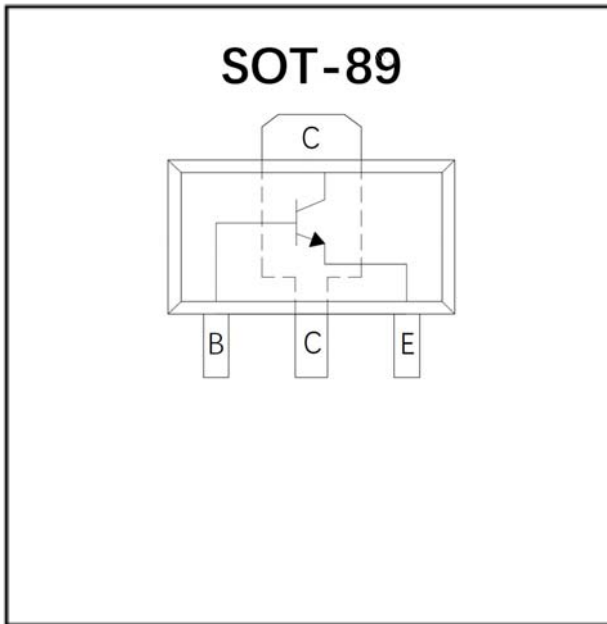


## NPN General Purpose Amplifier



### 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:

BCX55	BE
BCX55-16	BM

### Maximum Ratings (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	$V_{CEO}$	V	$I_C=10mA, I_B=0$	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



# BCX55

## Electrical Characteristics (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-Emitter Voltage	$V_{CE0}$	V	$I_C=10mA, I_B=0$	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
	$h_{FE2}$		$V_{CE}=2V, I_C=5mA$	40		
	$h_{FE3}$		$V_{CE}=2V, I_C=500mA$	25		
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	$I_C=10mA, V_{CE}=5V, f=100MHz$	130		

## Classification of $h_{FE}$

Rank	BXC55	BCX55-16
Range	63-250	100-250

## Ordering Information (Example)

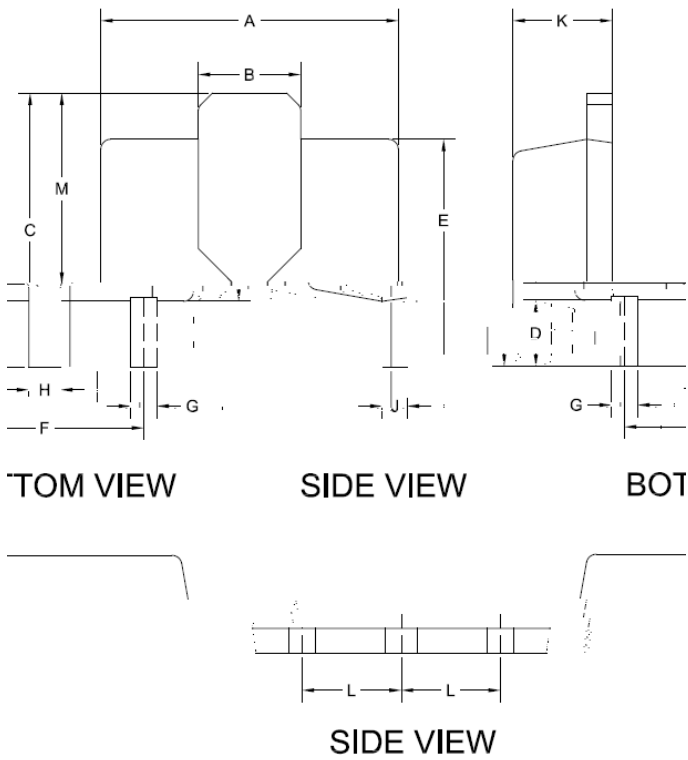
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	
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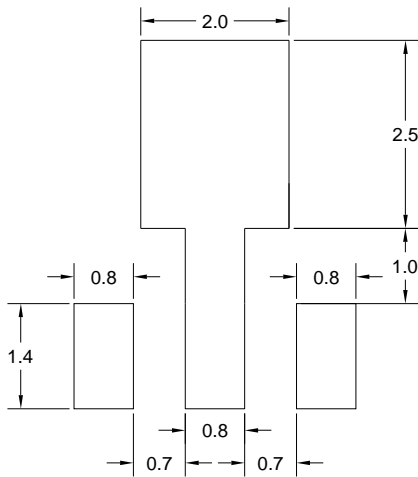
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SOT-89 Package Outline Dimensions



SOT-89 Suggested Pad Layout



UNIT:MM



## BCX55

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### Disclaimer

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