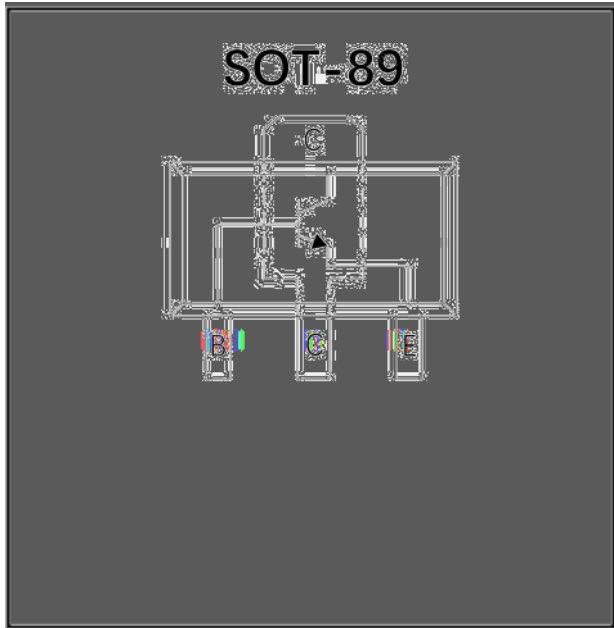


NPN General Purpose Amplifier



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_{CE0}	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	$R_{\theta JA}$	/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_{CEO}	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			$V_{CE}=2V, I_C=150mA$	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}

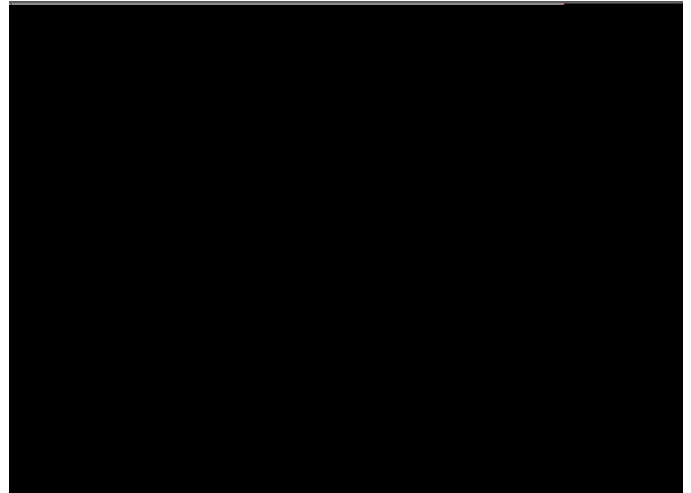
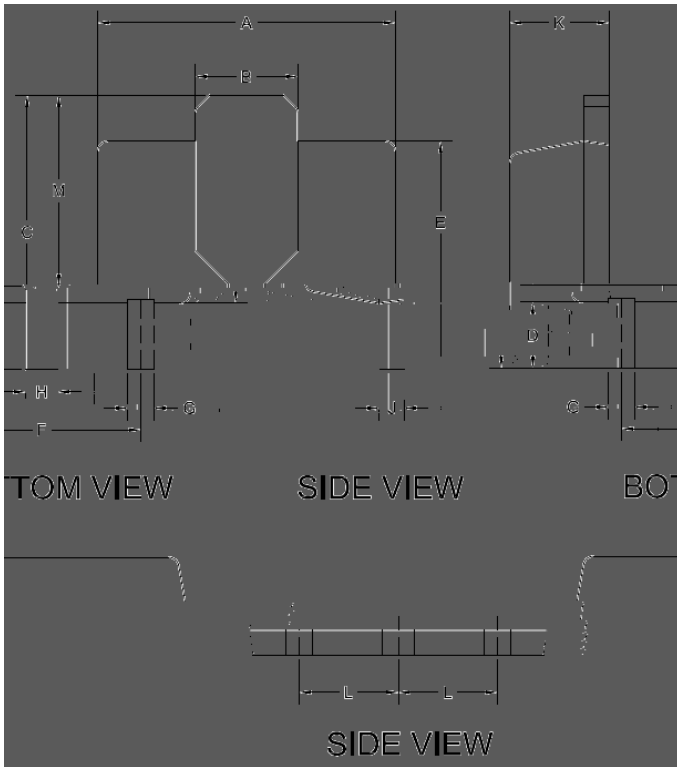
Rank	BXC55	BCX55-16
Range	63-250	100-250

■Ordering Information (Example)

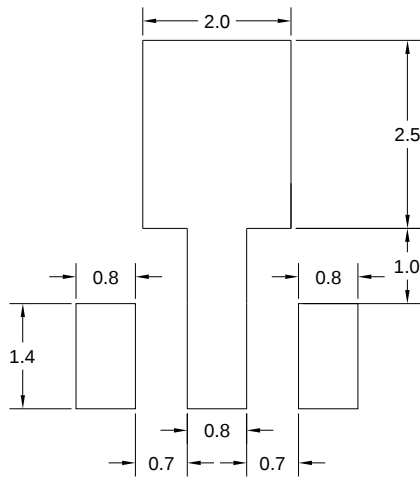
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)

% & ;

■SOT-89 Package Outline Dimensions



■SOT-89 Suggested Pad Layout



UNIT:MM



Disclaimer

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