

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: BL

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

Item	Symbol	Unit	Conditions	Value
Minimum Collector-Emitter Voltage	$V_{CEO}$	V	$I_C=10mA, I_B=0$	80
Minimum Collector-Base Voltage	$V_{CBO}$	V	$I_C=100\mu A, I_E=0$	100
Minimum Emitter-Base Voltage	$V_{EBO}$	V	$I_E=10\mu A, I_C=0$	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



# BCX56

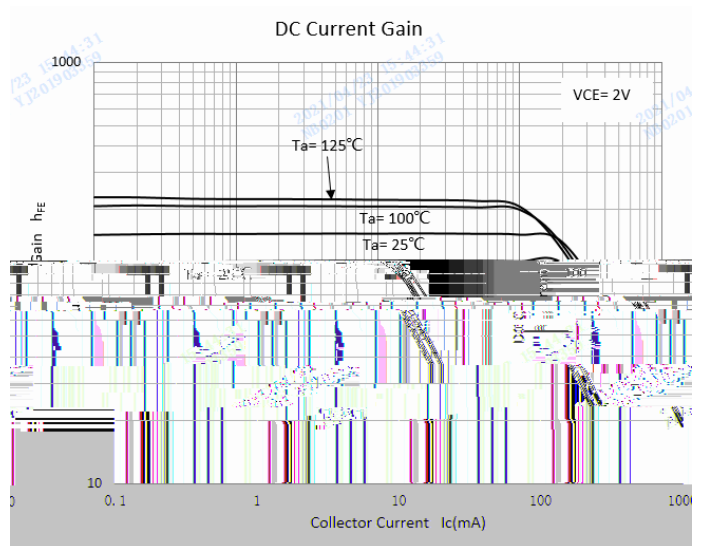
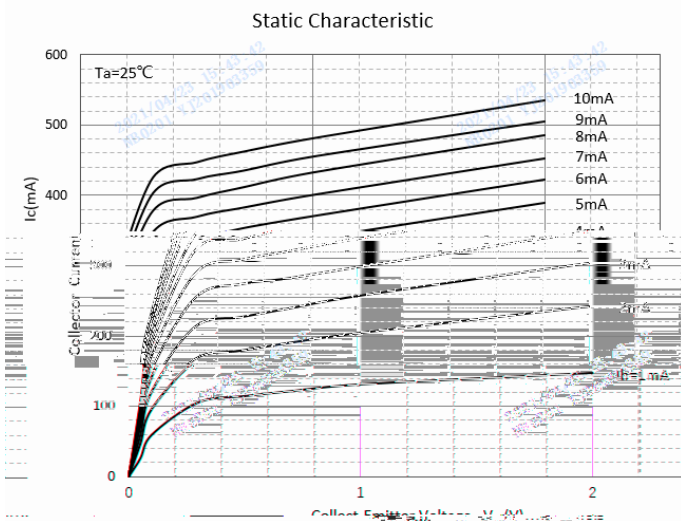
## Electrical Characteristics (Ta=25 unless otherwise noted)

Item	Symbol	Unit	Conditions	Min	TYP	Max
Collector-Emitter Voltage	$V_{CEO}$	V	$I_C=10mA, I_B=0$	80		
Collector-Base Voltage	$V_{CBO}$	V	$I_C=100\mu A, I_E=0$	100		
Emitter-Base Voltage	$V_{EBO}$	V	$I_E=10\mu A, I_C=0$	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	

## Ordering Information (Example)

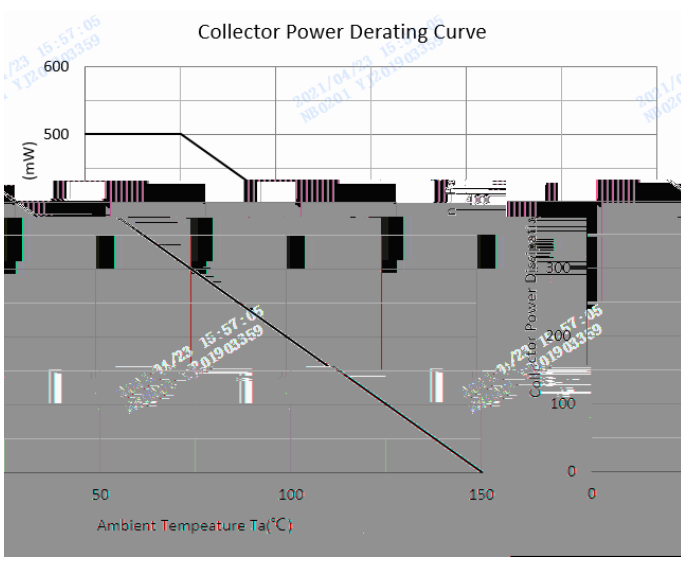
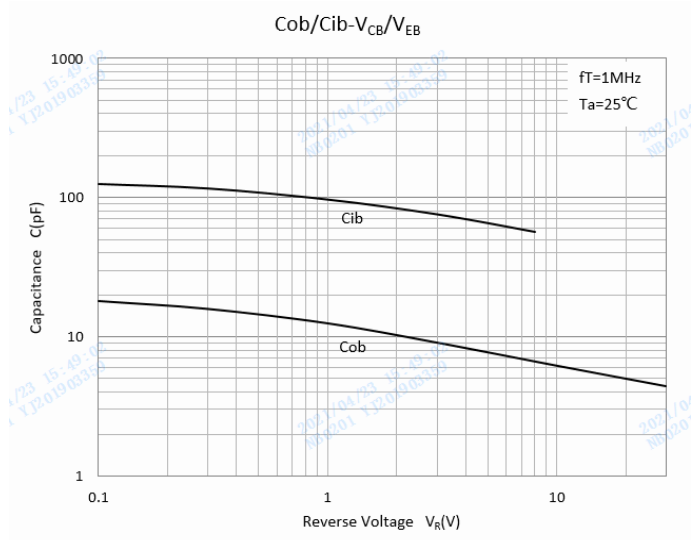
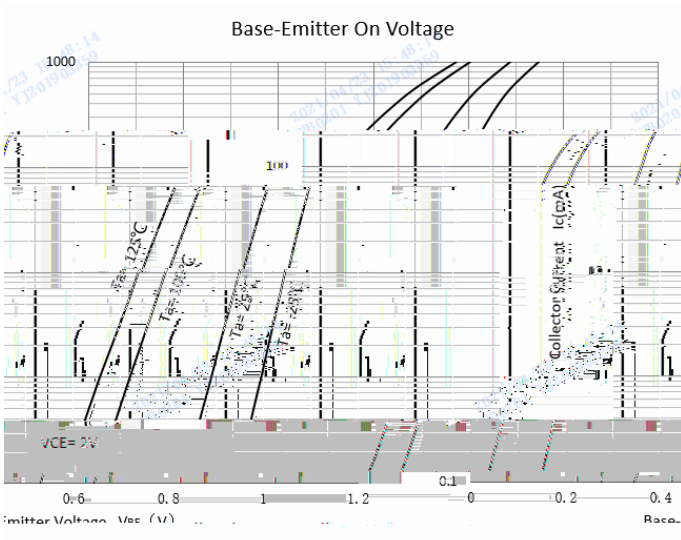
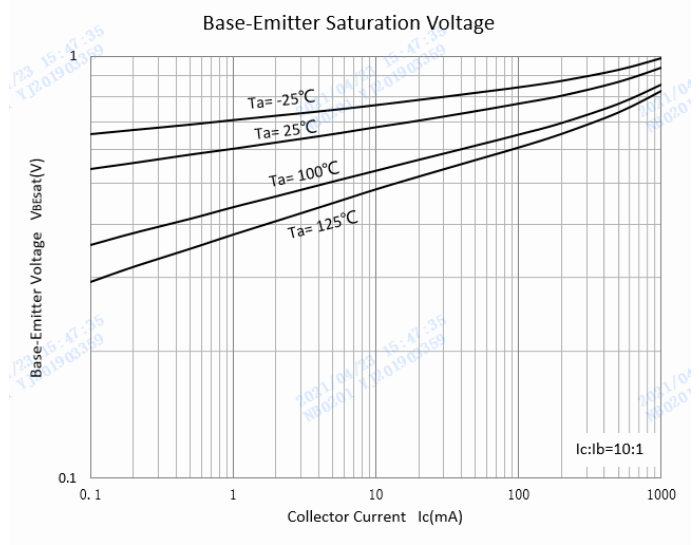
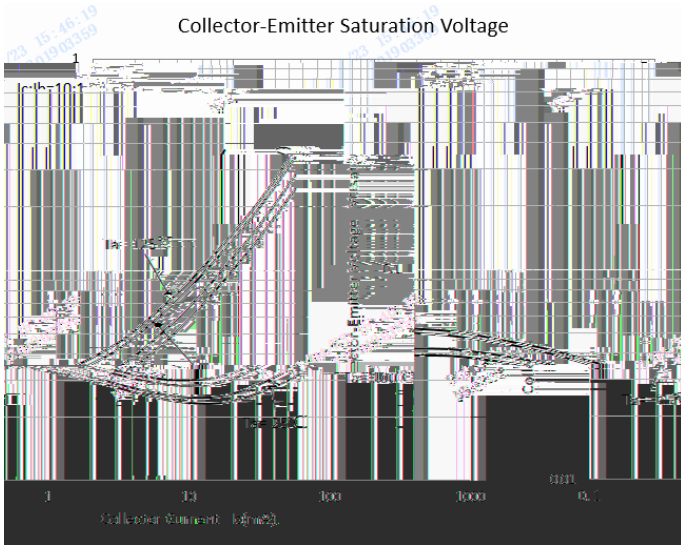
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BCX56	F2	Approximate 0.055	1000	8000	32000	7" reel

## Characteristics (Typical)





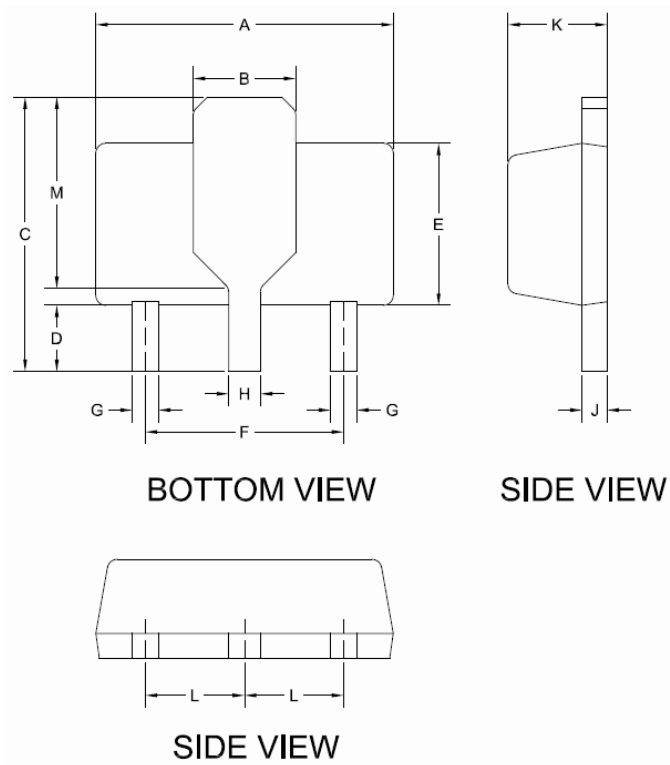
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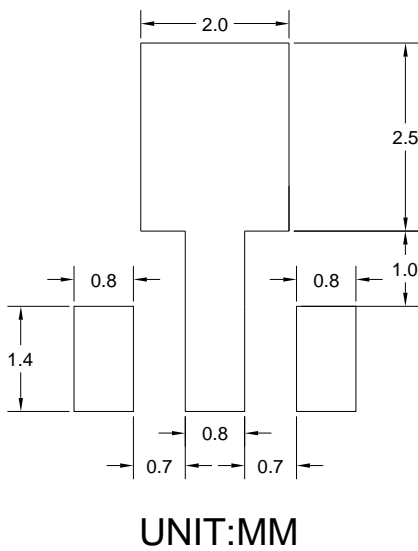
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## SOT-89 Package Outline Dimensions



DIMENSIONS		DIMENSIONS		DIM	MIN.
MAX.	MIN.	MAX.	MIN.		
0.181	4.400	4.600		A	0.173
061 TYP.	1.550 TYP.			B	0.
0.167	3.940	4.250		C	0.155
0.047	0.800	1.200		D	0.031
0.102	2.400	2.600		E	0.094
118 TYP.	3.00 TYP.			F	0.
0.019	0.360	0.480		G	0.014
0.022	0.440	0.560		H	0.017
0.017	0.350	0.440		J	0.014
0.063	1.400	1.600		K	0.055
0.118	1.500	1.600		L	0.063
0.118 TYP.	2.750 TYP.			M	0.10

## SOT-89 Suggested Pad Layout





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