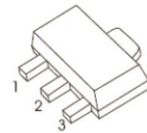


FEATURES

- Epoxy meets UL-94 V-0 flammability rating
- Complementary to BCX54,BCX55,BCX56
- Power Dissipation of 500mW
- High Stability and High Reliability

SOT-89

- 1. BASE
- 2. COLLECTOR
- 3. EMITTER



MECHANICAL DATA

- Case:SOT-89
- Terminals:Plated solderable per MIL-STD-750,method 2026
- Mounting Position: Any
- Marking:BCX51:AA, BCX51-10:AC, BCX51-16:AD
 BCX52:AE, BCX52-10:AG, BCX52-16:AM
 BCX53:AH, BCX53-10:AK, BCX53-16:AL

MAXIMUM RATINGS($T_A=25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Value	
Collector-Emitter Voltage	V_{CEO}	V	BCX51 BCX52 BCX53	-45 -60 -80
Collector-Base Voltage	V_{CBO}	V	BCX51 BCX52 BCX53	-45 -60 -100
Emitter-Base Voltage	V_{EBO}	V	-5.0	
Collector Current, Continuous	I_C	A	-1.0	
Power Dissipation	P_D	mW	500	
Operation Junction Temperature	T_J	$^{\circ}\text{C}$	-55 to +150	
Storage Temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +150	
Thermal resistance From junction to ambient	$R_{\theta JA}$	$^{\circ}\text{C}/\text{W}$	250	

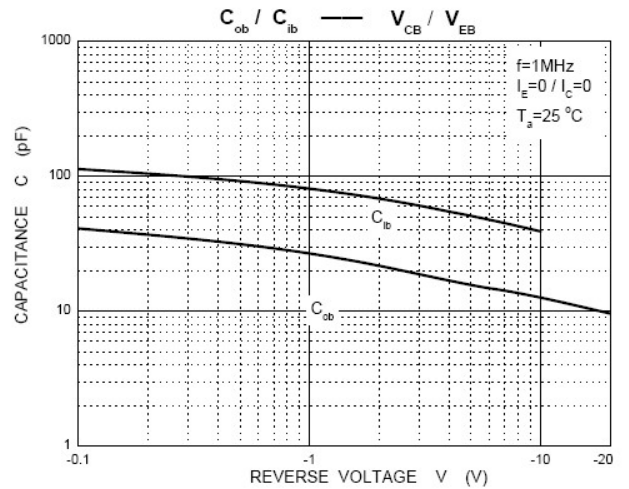
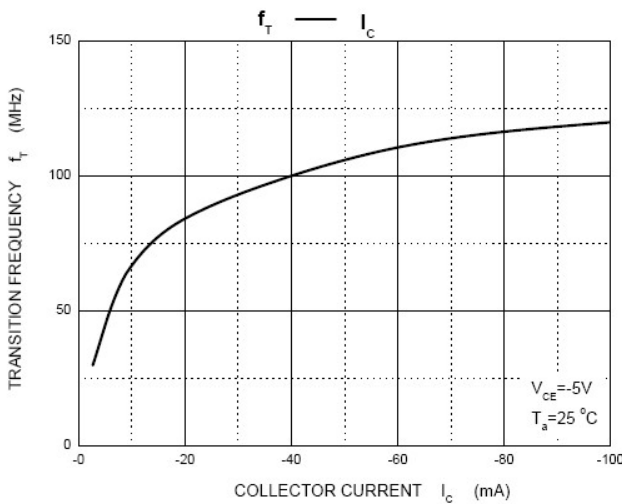
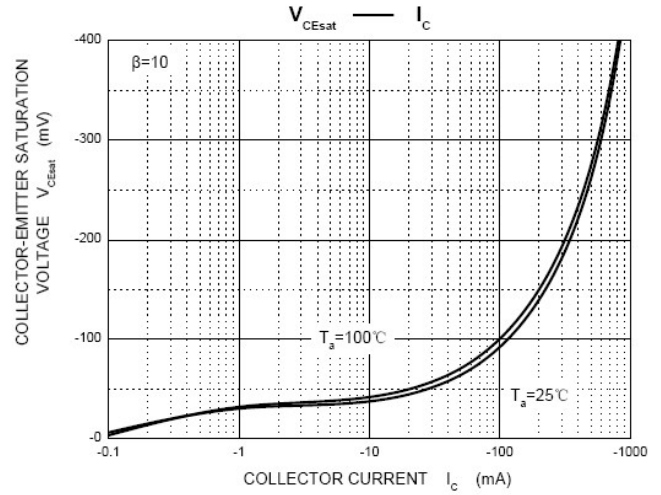
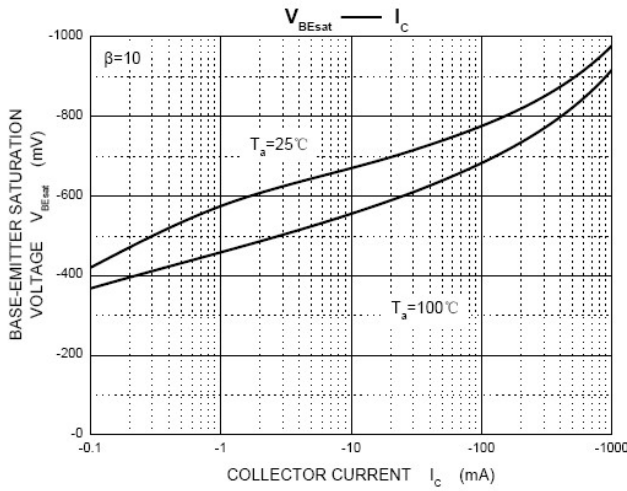
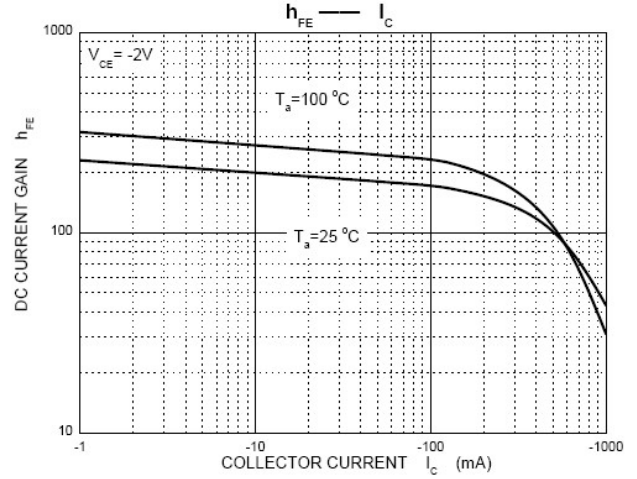
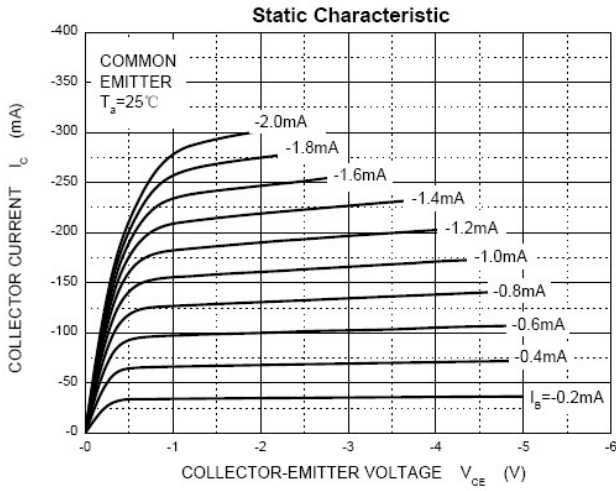
ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

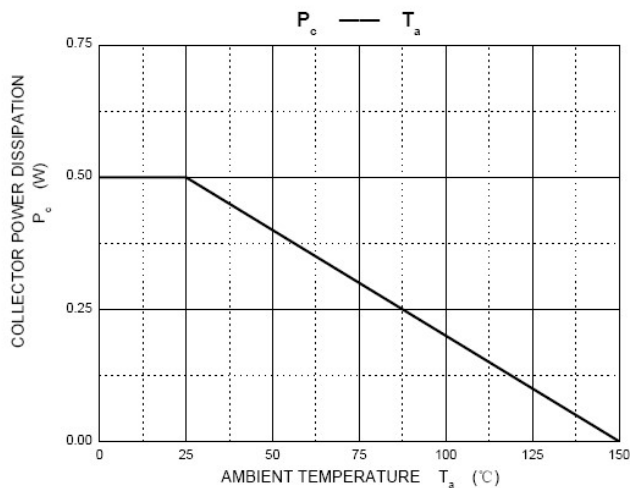
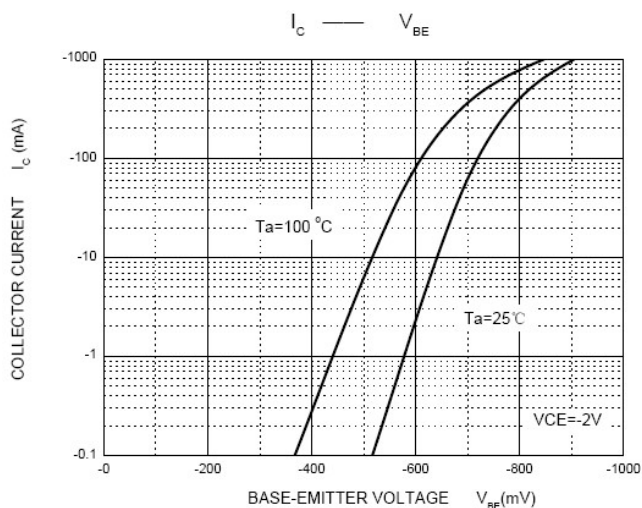
Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V _{(BR)CEO}	Vdc	I _C =-10mA, I _B =0 BCX51 BCX52 BCX53	-45 -60 -80	---
Collector-Base Breakdown Voltage	V _{(BR)CBO}	Vdc	I _C =-100μA, I _E =0 BCX51 BCX52 BCX53	-45 -60 -100	---
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	Vdc	I _E =-100μA, I _C =0	-5.0	---
Collector cut-off Current	I _{CBO}	μA	V _{CB} =-30V, I _E =0	---	-0.1
Emitter cut-off Current	I _{EBO}	μA	V _{EB} =-5V, I _C =0	---	-0.1
DC Current Gain	h _{FE(1)}		I _C =-5mA, V _{CE} =-2.0V	63	---
	h _{FE(2)}		I _C =-150mA, V _{CE} =-2.0V	63	250
	h _{FE(3)}		I _C =-500mA, V _{CE} =-2.0V	25	---
Collector-Emitter Saturation Voltage	V _{CE(set)}	Vdc	I _C =-500mA, I _B =-50mA	---	-0.5
Base-Emitter Saturation Voltage	V _{BE}	Vdc	V _{CE} =-2V, I _C =-500mA	---	-1.0
Current Gain-Bandwidth Product	f _T	MHZ	I _C =-10mA, V _{CE} =-5V f=100MHZ	50(TYP)	---

CLASSIFICATION OF h_{FE(2)}

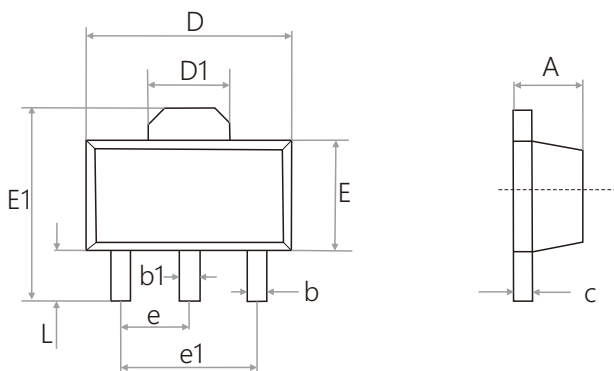
Rank	BCX51 BCX52 BCX53	BCX51-10 BCX52-10 BCX53-10	BCX51-16 BCX52-16 BCX53-16
Range	63-250	63-160	100-250

Characteristics(Typical)





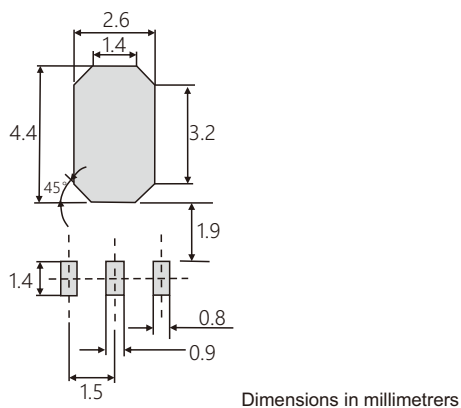
Outline Dimensions



SOT-89		
Dim	Min	Max
A	1.40	1.60
b	0.32	0.52
b1	0.40	0.58
c	0.35	0.44
D	4.40	4.60
D1	1.55REF	
E	2.30	2.60
E1	3.94	4.25
e	1.50TYP	
e1	3.00TYP	
L	0.90	1.20

Dimensions in millimeters

Suggested pad layout



Dimensions in millimeters

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