

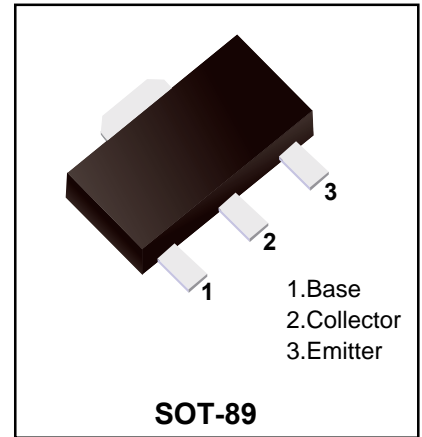
**TRANSISTOR (NPN)**

**FEATURES**

- ◆Complementary to BCX51, BCX52,BCX53
- ◆Power Dissipation of 500mW
- ◆High Stability and High Reliability

**MECHANICAL DATA**

- ◆Case: SOT-89
- ◆Epoxy UL: 94V-0
- ◆Mounting Position: Any



**Maximum Ratings & Thermal Characteristics**

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Collector-Base Voltage	BCX54 BCX55 BCX56	45 60 100	V
Collector-Emitter Voltage	BCX54 BCX55 BCX56	45 60 80	V
Emitter -Base Voltage	<b>VEBO</b>	5	V
Collector Current-Continuous	<b>IC</b>	1.0	A
Collector Current-Pulsed	<b>I<sub>cm</sub></b>	1.5	A
Base Curren	<b>IB</b>	0.1	A
Collector Power Dissipation	<b>PC</b>	500	mW
Junction Temperature	<b>T<sub>J</sub></b>	150	°C
Storage Temperature	<b>T<sub>STG</sub></b>	-55-+150	°C
Thermal Resistance, Junction ambient	<b>R<sub>θJA</sub></b>	250	°C/W

**Electrical Characteristics**

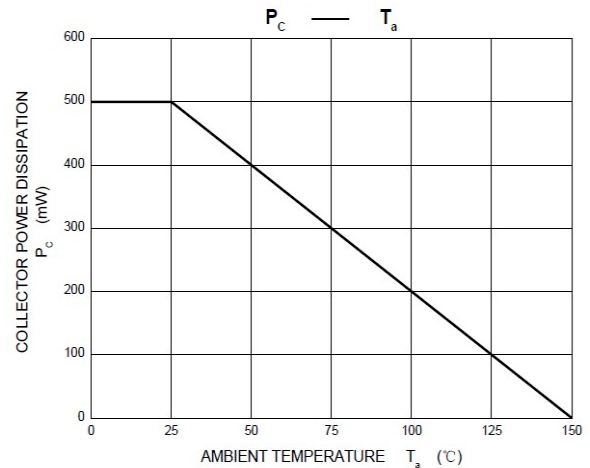
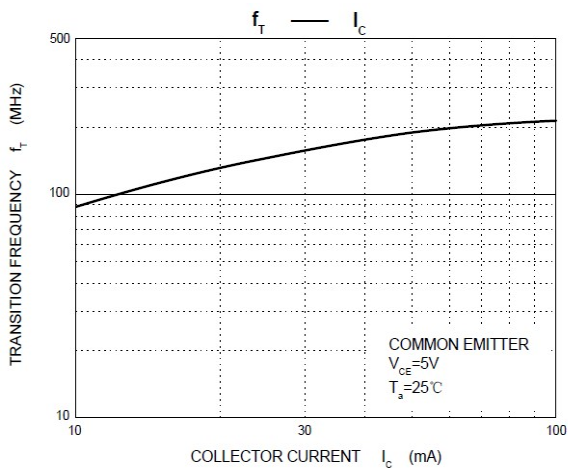
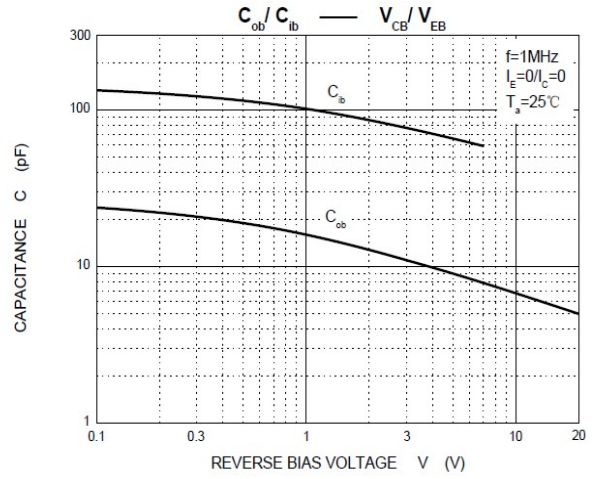
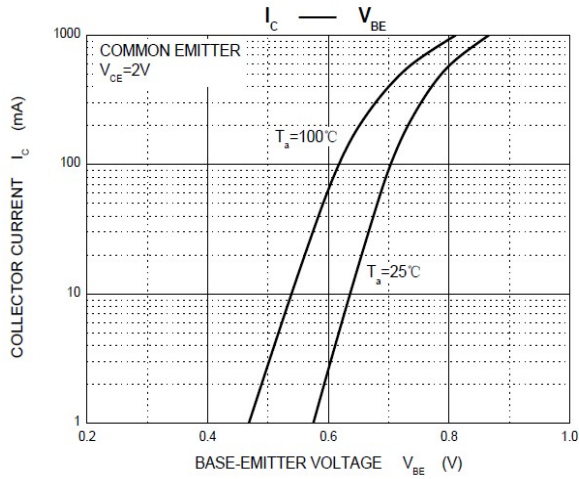
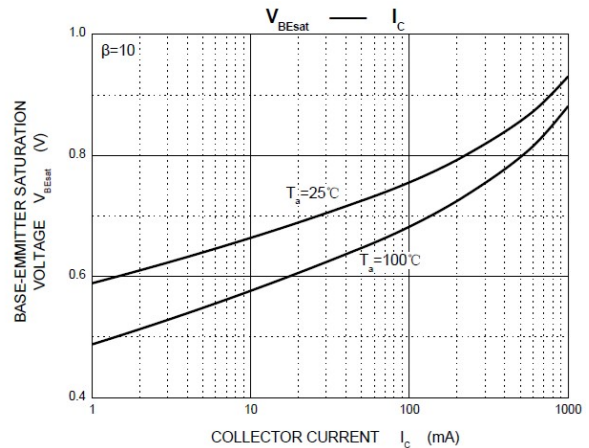
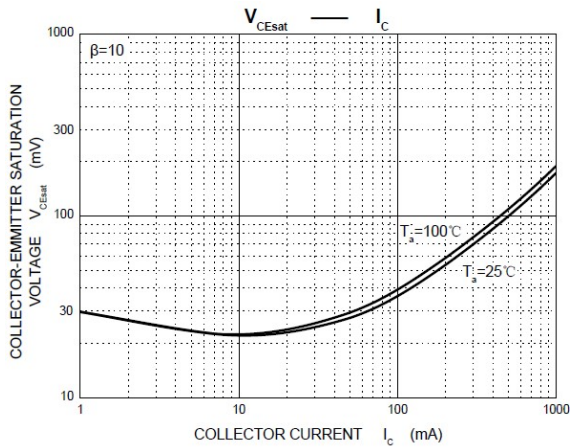
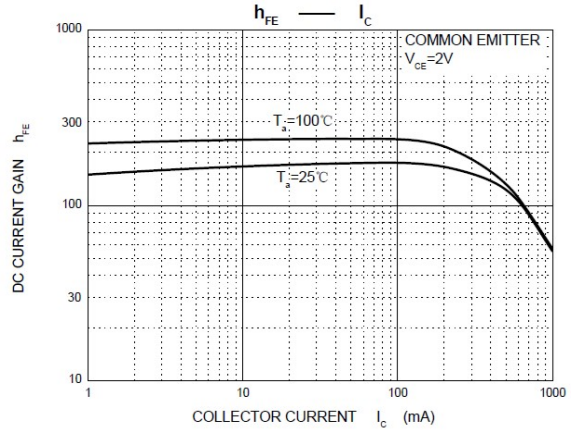
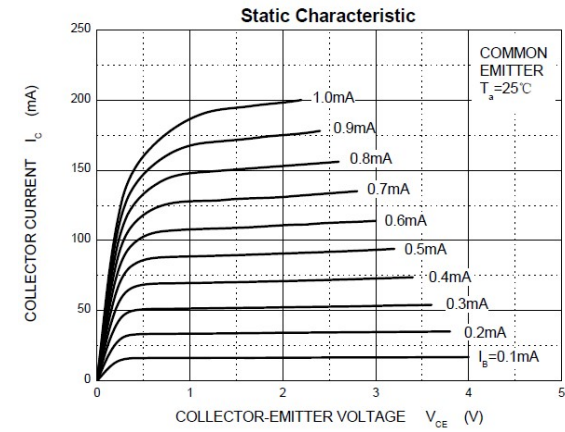
(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Test Condition	Symbols	Min	Typ	Max	Unit
Collector-base breakdown voltage	IC=100uA, IE=0	BCX54 BCX55 BCX56	45 60 100			V
Collector-emitter breakdown voltage	IC=10mA, IB=0	BCX54 BCX55 BCX56	45 60 80			V
Emitter-base breakdown voltage	IE=10uA, IC=0	<b>V(BR)EBO</b>	5			V
Collector cut-off current	VCB=30V, IE=0	<b>ICBO</b>			100	nA
Emitter cut-off current	VEB=5V, IC=0	<b>IEBO</b>			100	nA
DC current gain	VCE=2V, IC=5mA	<b>hFE(1)</b>	40			
	VCE=2V, IC=150mA	<b>hFE(2)</b>	63		250	
	VCE=2V, IC=500mA	<b>hFE(3)</b>	25			
Collector-emitter saturation voltage	IC=500mA, IB=50mA	<b>VCE(sat)</b>			0.50	V
Base -emitter voltage	VCE=2V, IC=500mA	<b>VBE</b>			1.00	V
Transition frequency	VCE=5V, IC=10mA,f=100MHz	<b>f<sub>T</sub></b>		130		MHz

**hFE Classification**

Type	BCX54	BCX54-10	BCX54-16	BCX55	BCX55-10	BCX55-16	BCX56	BCX56-10	BCX56-16
Range	63-250	63-160	100-250	63-250	63-160	100-250	63-250	63-160	100-250
Marking	BA	BC	BD	BE	BG	BM	BH	BK	BLK510

**Ratings and Characteristic Curves**



**Ordering information**

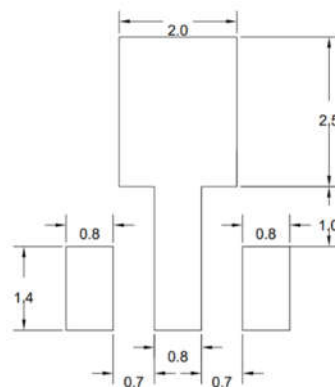
Package	Packing Description	Base Quantity	Packing Quantity
SOT-89	Tape/Reel,7"reel	1000pcs/Reel	6000PCS/Box 30000PCS/Carton

**Package Dimensions**

**SOT-89**

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

**The recommended mounting pad size**



UNIT:MM

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