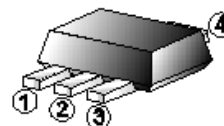


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low Voltage
- High Current

SOT-89



CLASSIFICATION OF h_{FE}

Product-Rank	BCX56-10	BCX56-16
Range	63~160	100~250
Marking	BK	BL

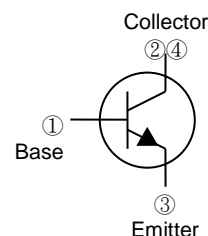
PACKAGE INFORMATION

Package	MPQ	Reel Size
SOT-89	1K	7 inch

ORDER INFORMATION

Part Number	Type
BCX56-□-C	Lead (Pb)-free and Halogen-free

*□= h_{FE} Rank



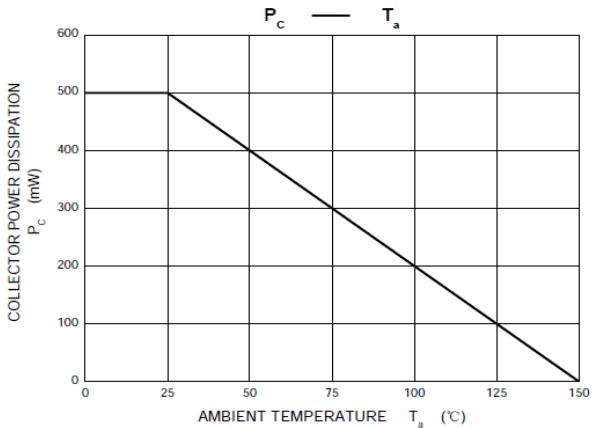
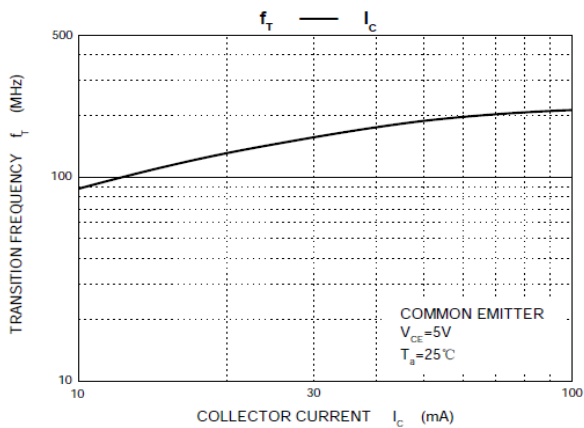
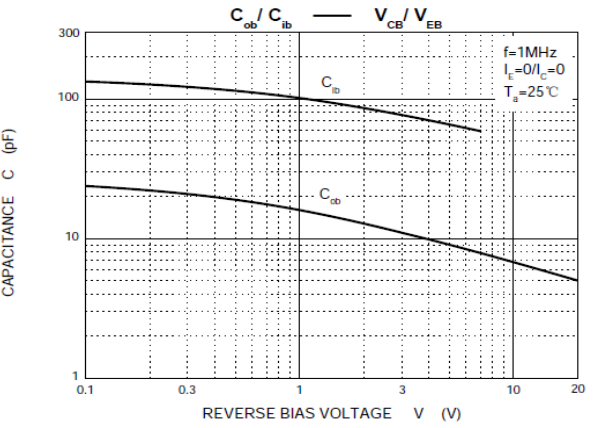
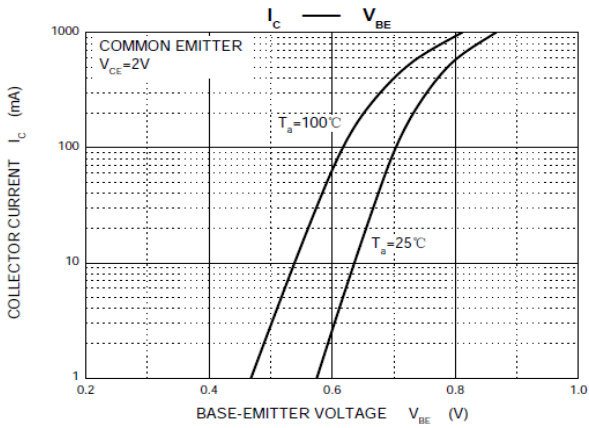
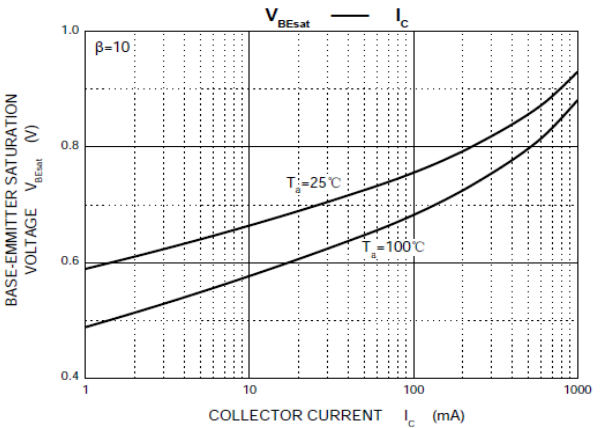
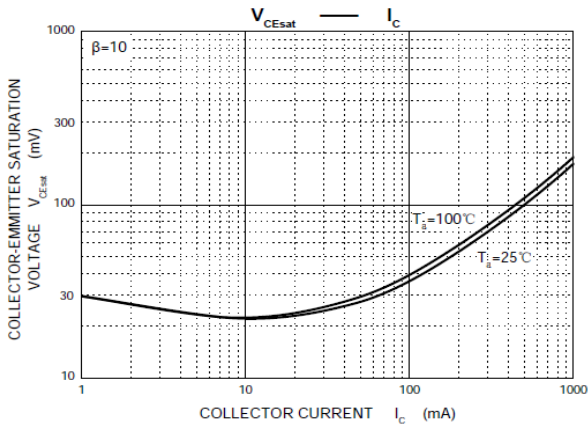
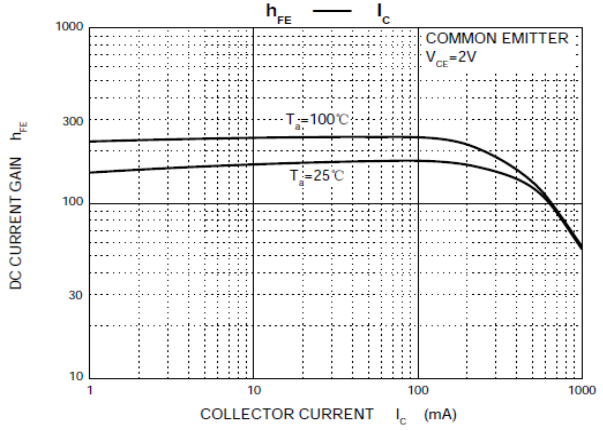
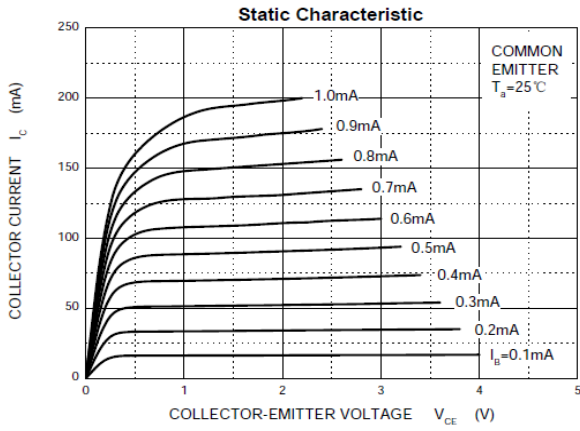
ABSOLUTE MAXIMUM RATINGS ($T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	100	V
Collector-Emitter Voltage	V_{CEO}	80	
Emitter-Base Voltage	V_{EBO}	5	
Collector Current	I_C	1	A
Base Current	I_B	0.1	A
Peak Base Current ($t_p < 1\text{ms}$)	I_{BM}	0.2	A
Collector Power Dissipation	P_C	500	mW
Thermal Resistance from Junction-Ambient	$R_{\theta JA}$	250	$^\circ\text{C}/\text{W}$
Junction & Storage Temperature Range	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

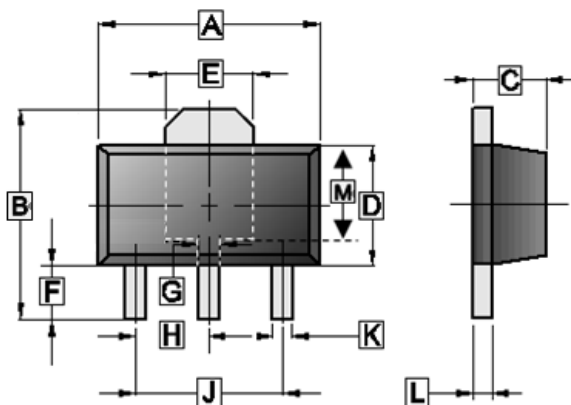
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	100	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	80	-	-		$I_C=10\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-		$I_E=10\mu\text{A}, I_C=0$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=30\text{V}, I_E=0$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1		$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	h_{FE}	40	-	-		$V_{CE}=2\text{V}, I_C=5\text{mA}$
		63	-	250		$V_{CE}=2\text{V}, I_C=150\text{mA}$
		25	-	-		$V_{CE}=2\text{V}, I_C=0.5\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C=0.5\text{A}, I_B=50\text{mA}$
Base-Emitter Voltage	$V_{BE(on)}$	-	-	1	V	$V_{CE}=2\text{V}, I_C=0.5\text{A}$
Transition Frequency	f_T	-	130	-	MHz	$V_{CE}=5\text{V}, I_C=10\text{mA}, f=100\text{MHz}$

CHARACTERISTIC CURVES



PACKAGE OUTLINE DIMENSIONS

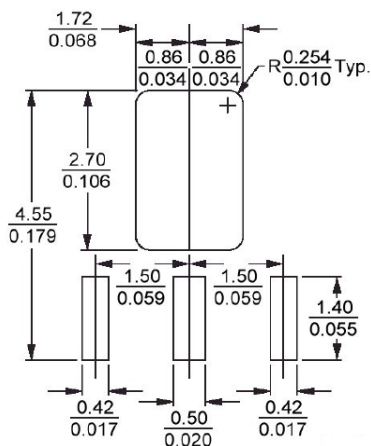
SOT-89



REF.	Millimeter	
	Min.	Max.
A	4.40	4.60
B	3.94	4.25
C	1.40	1.60
D	2.25	2.60
E	1.55 TYP.	
F	0.89	1.20
G	0.40	0.58
H	1.50 TYP.	
J	3.00 TYP.	
K	0.32	0.52
L	0.35	0.44
M	1.75 REF.	

MOUNTING PAD LAYOUT

SOT-89



*Dimensions in millimeters