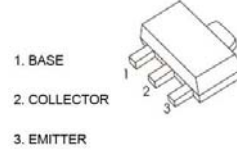


TRANSISTOR(NPN)

Features

1. Complementary to BCX51,BCX52,BCX53
2. Power Dissipation of 500mW
3. High Stability and High Reliability

SOT-89



Maximum Ratings & Thermal Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	TYPE		Unit
Collector-Base Voltage	V_{CBO}	BCX54	45	V
		BCX55	60	
		BCX56	100	
Collector-Emitter Voltage	V_{CEO}	BCX54	45	V
		BCX55	60	
		BCX56	80	
Emitter -Base Voltage	V_{EBO}		5	V
Collector Current-Continuous	I_C		1	A
Base Curren	I_B		0.1	A
Collector Power Dissipation	P_C		500	mW
Junction Temperature	T_j		150	°C
Storage Temperature	T_{stg}		-205	°C
Thermal resistance From junction to ambient	$R_{\theta JA}$		250	°C/W

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

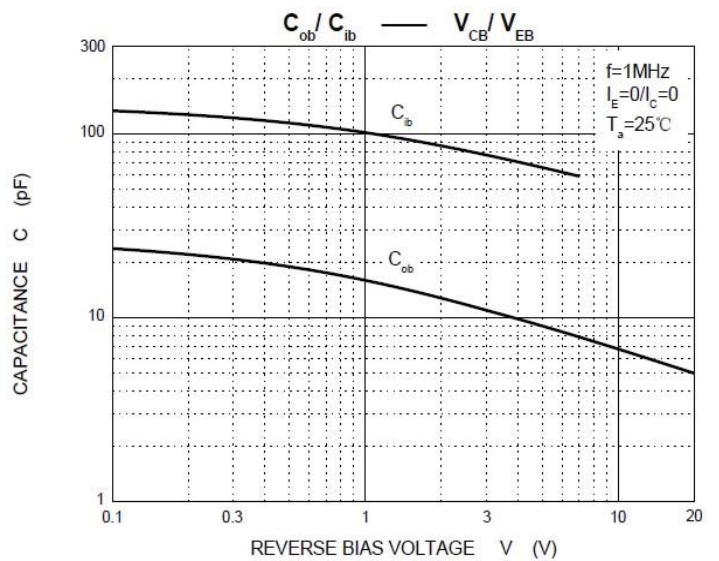
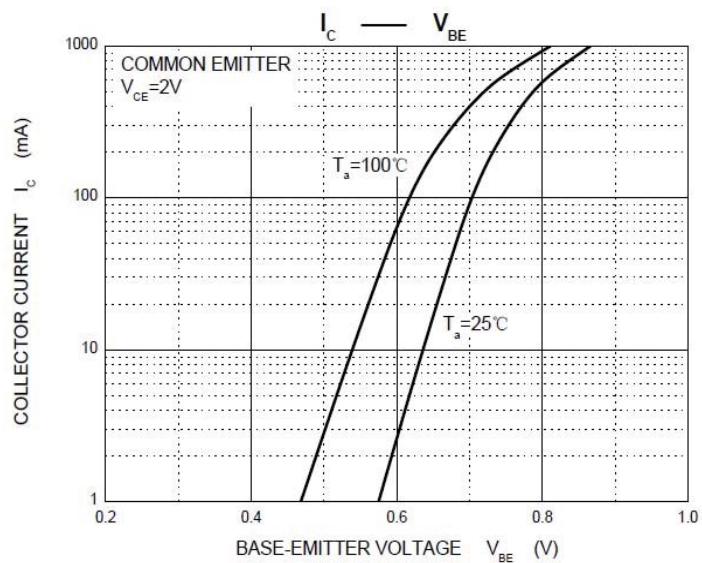
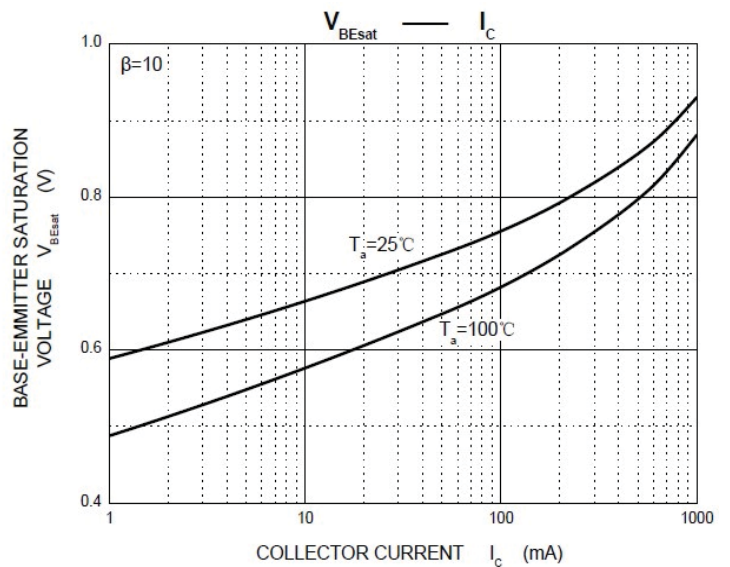
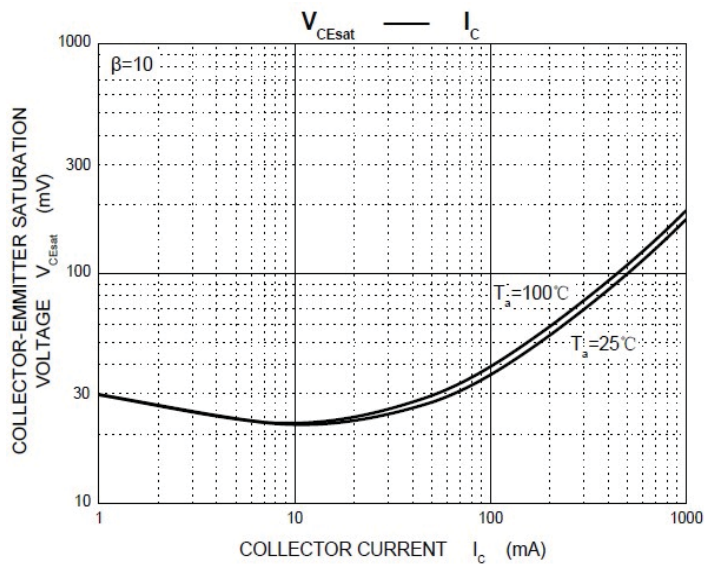
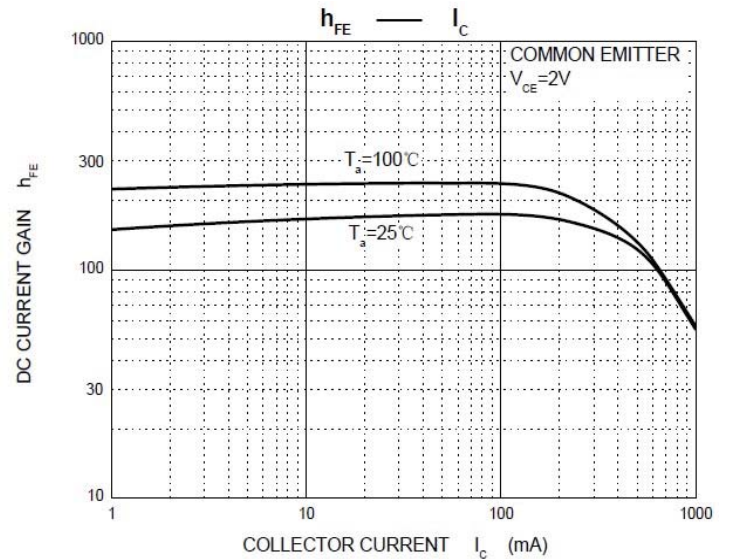
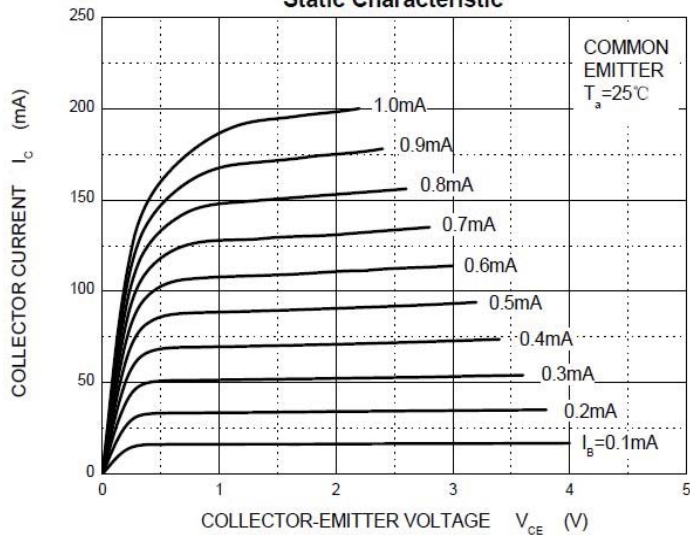
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V(BR)CBO$	$I_C=100\mu A, I_E=0$	BCX54	45		V
			BCX55	60		
			BCX56	100		
Collector-emitter breakdown voltage	$V(BR)CEO$	$I_C=10mA, I_B=0$	BCX54	45		V
			BCX55	60		
			BCX56	80		
Emitter-base breakdown voltage	$V(BR)EBO$	$I_E=10\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=30V, I_E=0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			100	nA
DC current gain	$h_{FE}(1)$	$V_{CE}=2V, I_C=5mA$	40			
	$h_{FE}(2)$	$V_{CE}=2V, I_C=150mA$	63		250	
	$h_{FE}(3)$	$V_{CE}=2V, I_C=500mA$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500mA, I_B=50mA$			0.5	V
Base -emitter voltage	V_{BE}	$V_{CE}=2V, I_C=500mA$			1	V
Transition frequency	f_T	$V_{CE}=5V, I_C=10mA, f=100MHz$		130		MHz

CLASSIFICATION OF $h_{FE}(2)$

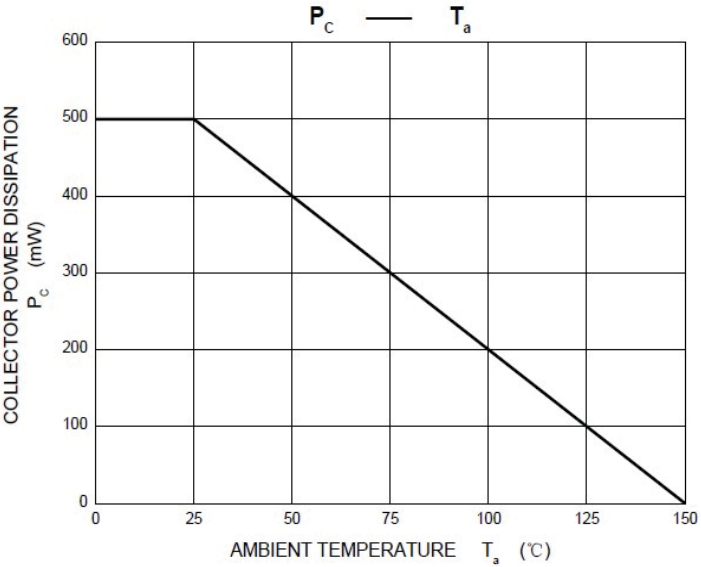
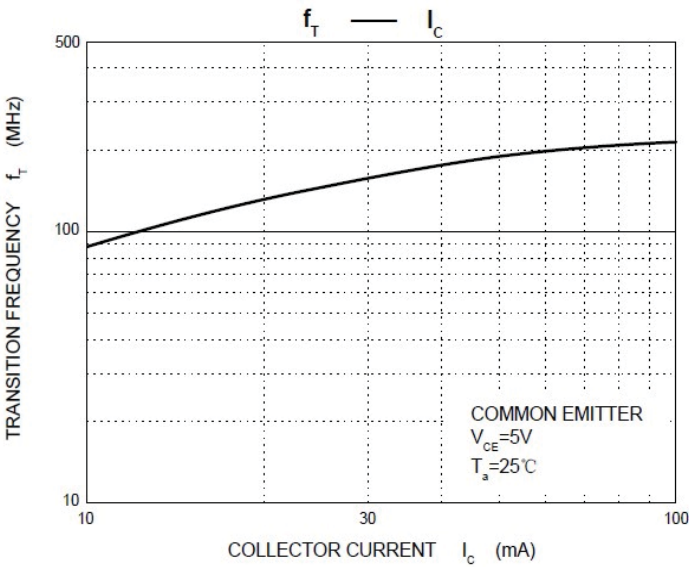
RANK		-10	-16
RANGE	63-250	63-160	100-250

RATING AND CHARACTERISTICS CURVES (BCX54,BCX55,BCX56)

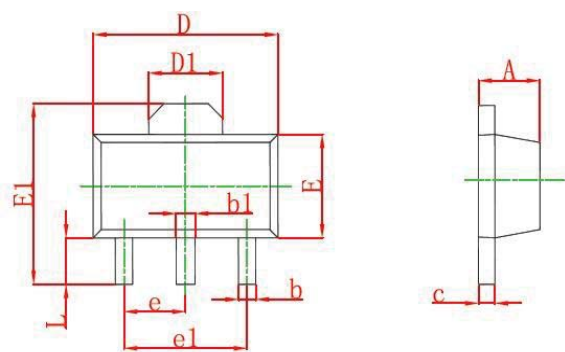
Static Characteristic



RATING AND CHARACTERISTICS CURVES (BCX54,BCX55,BCX56)



SOT-89-3L PACKAGE OUTLINE Plastic surface mounted package



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047

MARKING:BCX54:BA, BCX54-10:BC, BCX54-16:BD
BCX55:BE, BCX55-10:BG, BCX55-16BM
BCX56:B H, BCX56-10:BK, BCX56-16:BL

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