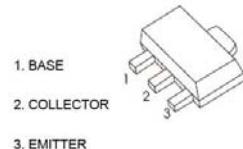


BCX54
 BCX55
 BCX56

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 Current	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 _{θJA}		250	°C/W

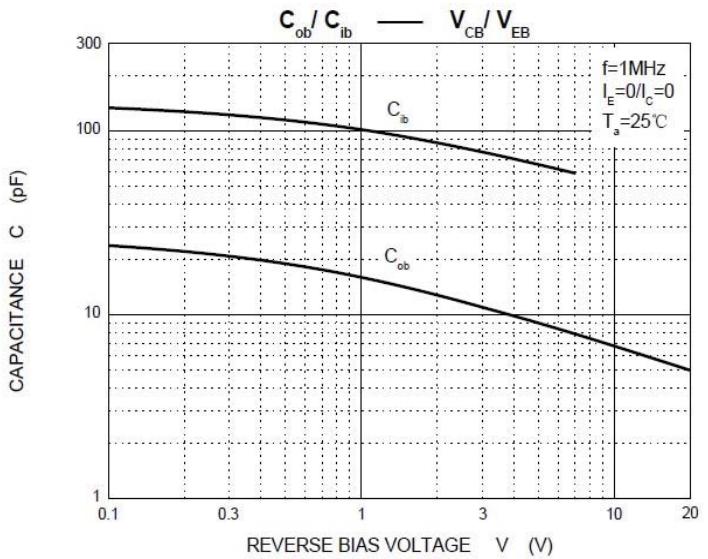
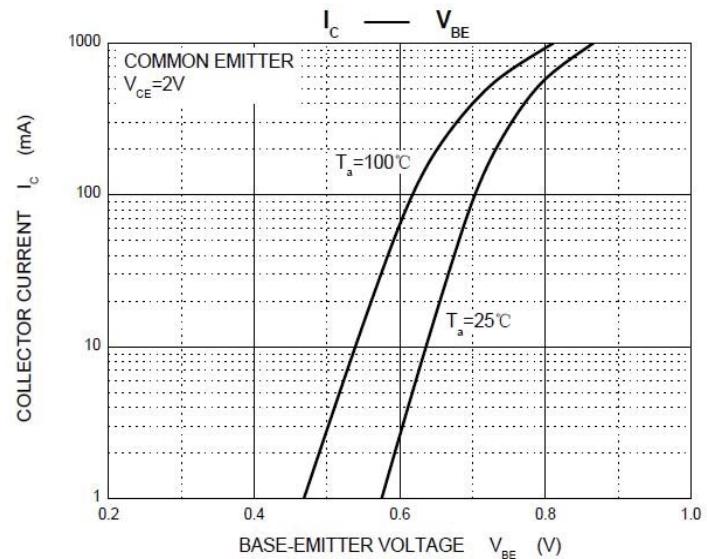
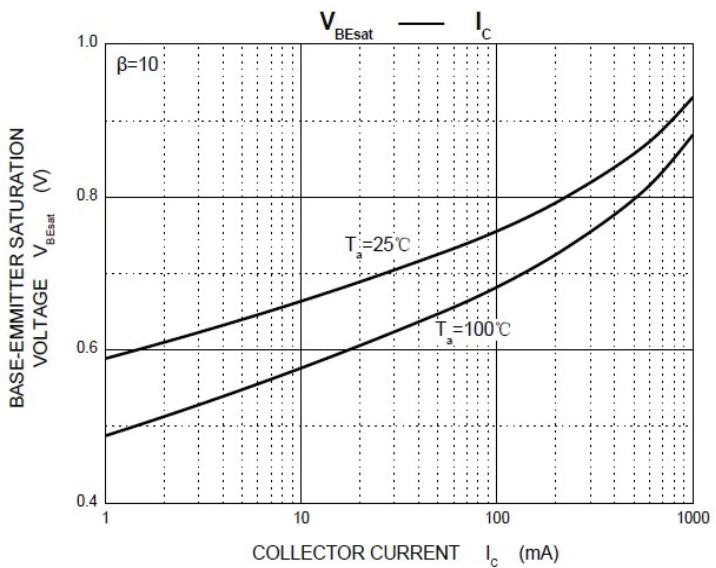
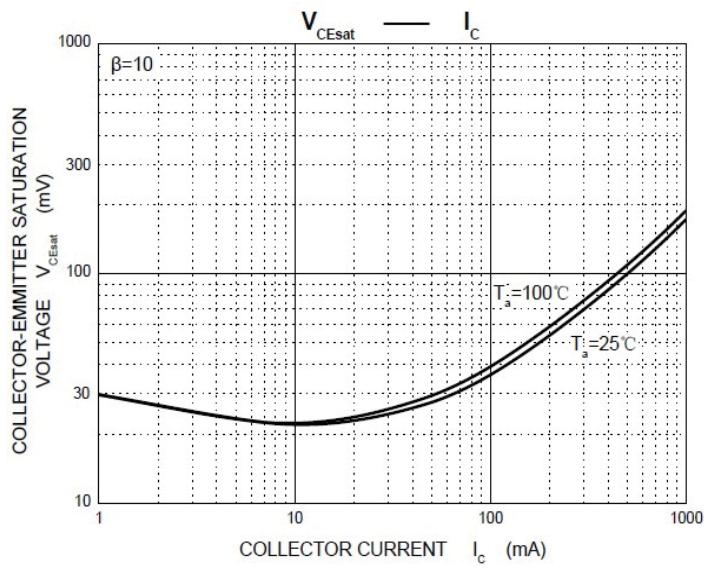
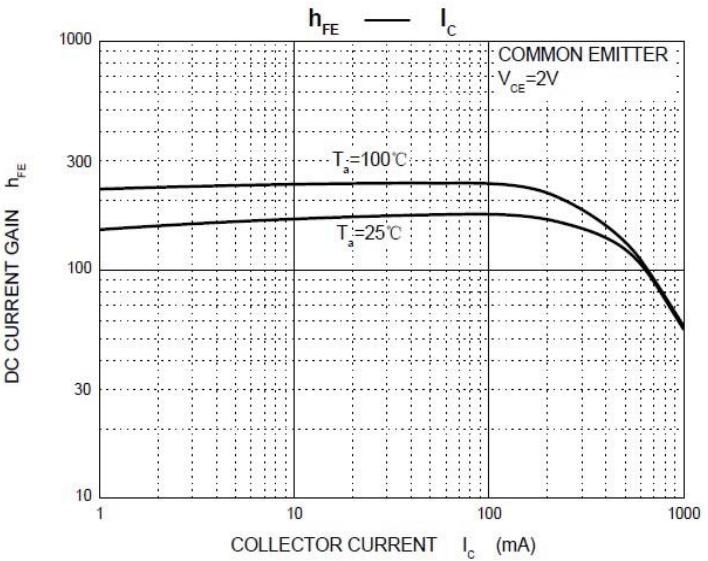
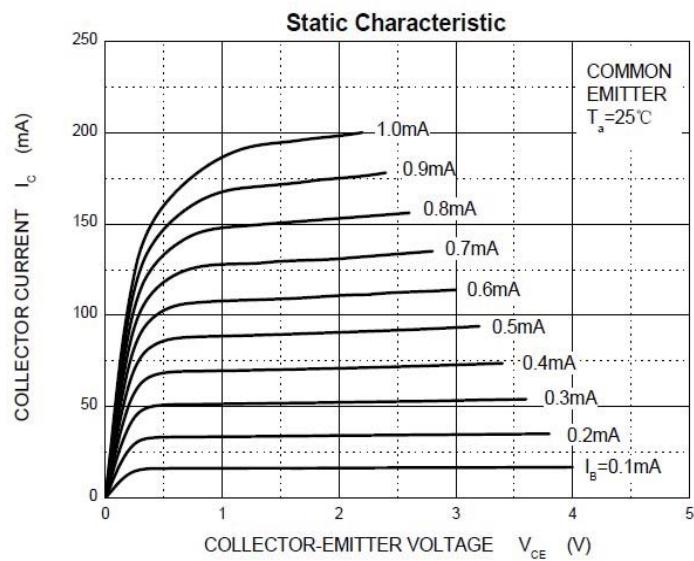
Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=100uA, IE=0	BCX54	45		V
			BCX55	60		
			BCX56	100		
Collector-emitter breakdown voltage	V(BR)CEO	IC=10mA, IB=0	BCX54	45		V
			BCX55	60		
			BCX56	80		
Emitter-base breakdown voltage	V(BR)EBO	IE=10uA, IC=0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =30V, IE=0			100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, IC=0			100	nA
DC current gain	h _{FE} (1)	V _{CE} =2V, IC=5mA	40			
	h _{FE} (2)	V _{CE} =2V, IC=150mA	63		250	
	h _{FE} (3)	V _{CE} =2V, IC=500mA	25			
Collector-emitter saturation voltage	V _{CE(sat)}	IC=500mA, IB=50mA			0.5	V
Base -emitter voltage	V _{BE}	V _{CE} =2V, IC=500mA			1	V
Transition frequency	f _T	V _{CE} =5V, IC=10mA,f=100MHz		130		MHz

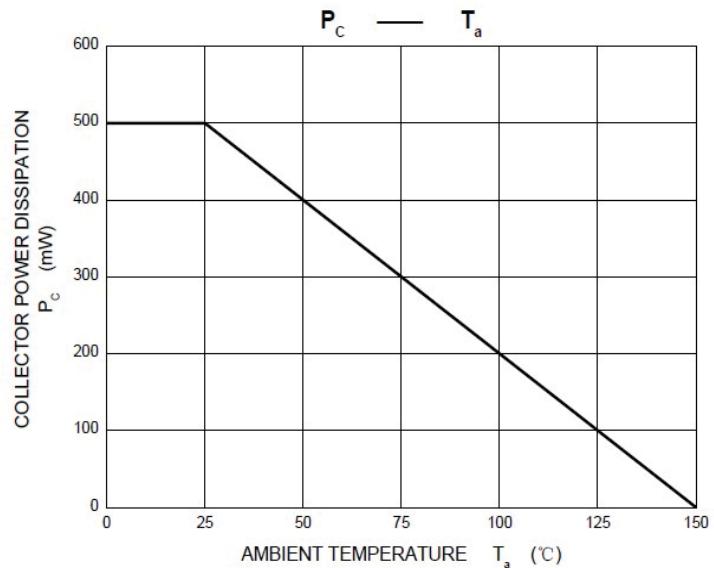
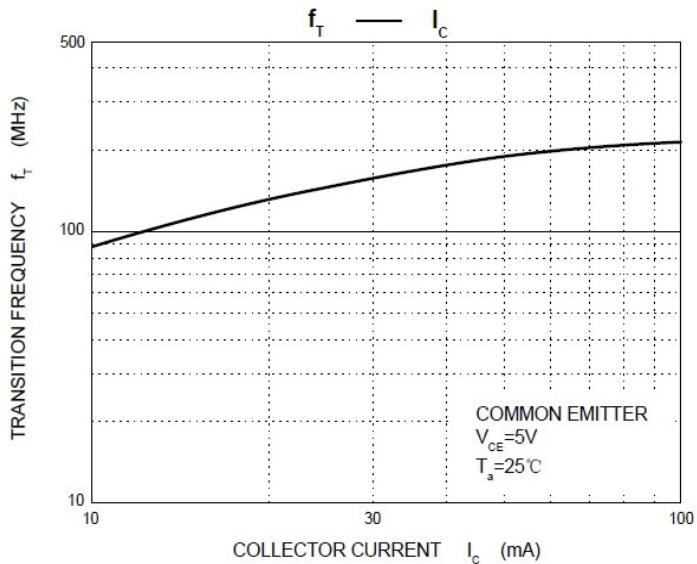
CLASSIFICATION OF h_{FE}(2)

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

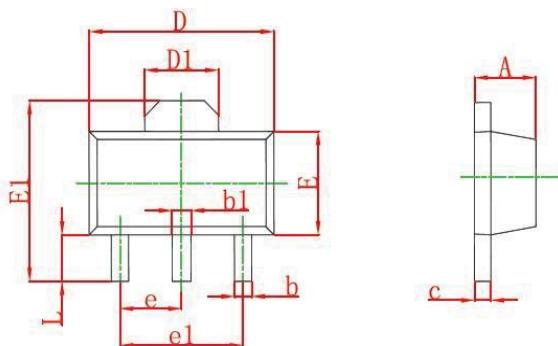
RATING AND CHARACTERISTICS CURVES (BCX54,BCX55,BCX56)



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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