RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

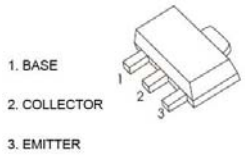
BCX54 BCX55 BCX56

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℃ 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	℃
Storage Temperature	Tstg		-205	℃
Thermal resistance From junction to ambient	$R_{\theta JA}$		250	℃/W

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

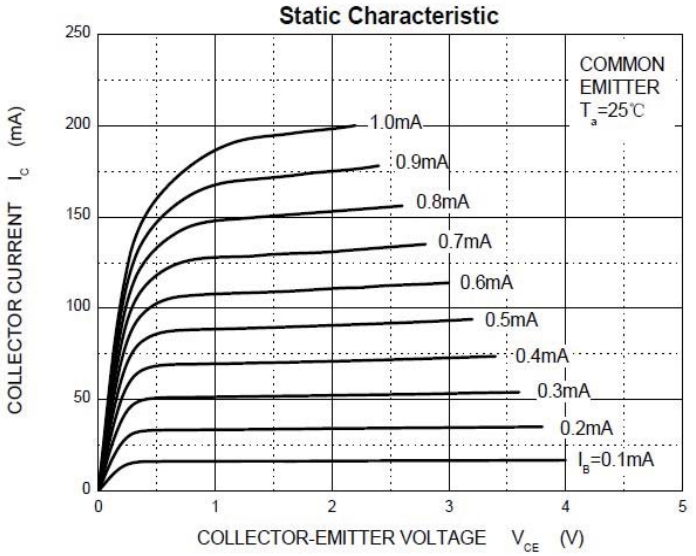
Parameter	Symbols	Test Condition		Limits			Unit
				Min	Typ	Max	
Collector-base breakdown voltage	V(BR)CBO	IC=100uA, IE=0	BCX54	45			
			BCX55	60			V
			BCX56	100			
Collector-emitter breakdown voltage	V(BR)CEO	IC=10mA, IB=0	BCX54	45			
			BCX55	60			V
			BCX56	80			
Emitter-base breakdown voltage	V(BR)EBO	IE=10uA, IC=0		5			V
Collector cut-off current	ICBO	VCB=30V, IE=0				100	nA
Emitter cut-off current	IEBO	VEB=5V, IC=0				100	nA
DC current gain	hFE(1)	VCE=2V, IC=5mA		40			
	hFE(2)	VCE=2V, IC=150mA		63		250	
	hFE(3)	VCE=2V, IC=500mA		25			
Collector-emitter saturation voltage	VCE(sat)	IC=500mA, IB=50mA				0.5	V
Base -emitter voltage	VBE	VCE=2V, IC=500mA				1	V
Transition frequency	fT	VCE=5V, IC=10mA,f=100MHz			130		MHz

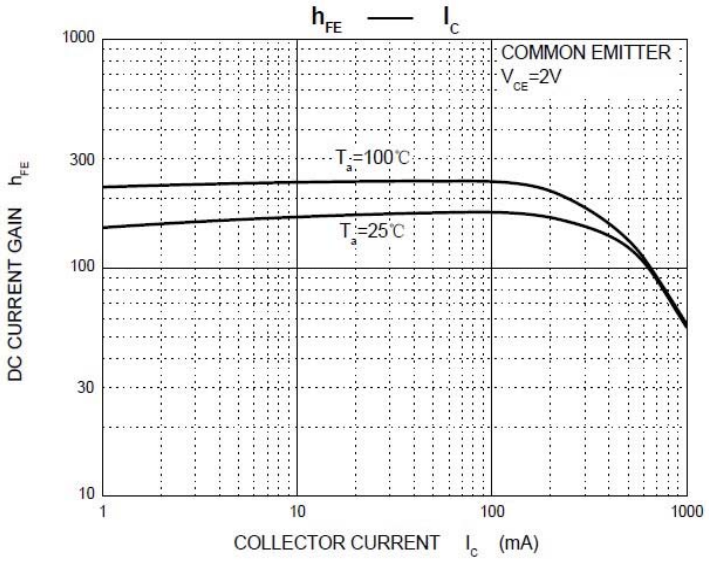
CLASSIFICATION OF hFE(2)

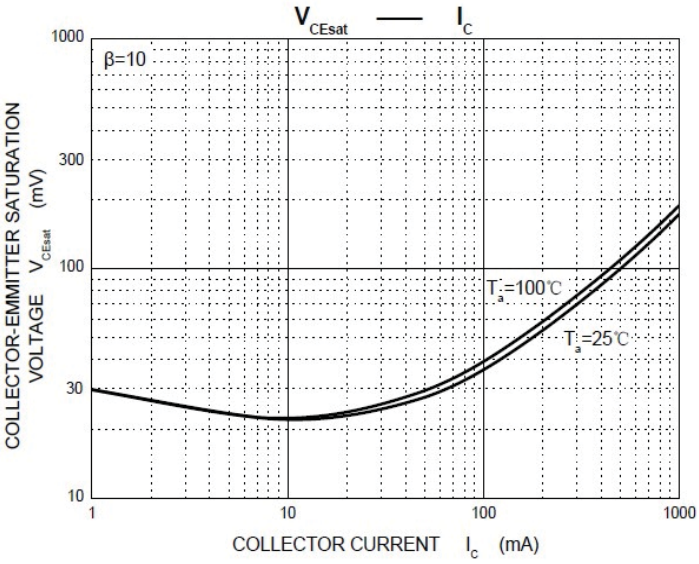
RANK		-10	-16
RANGE	63-250	63-160	100-250

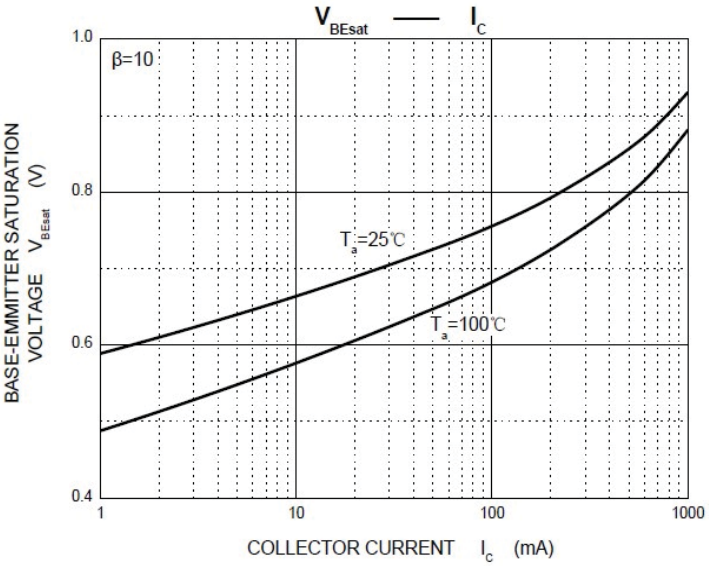
2024-04/17
REV:O

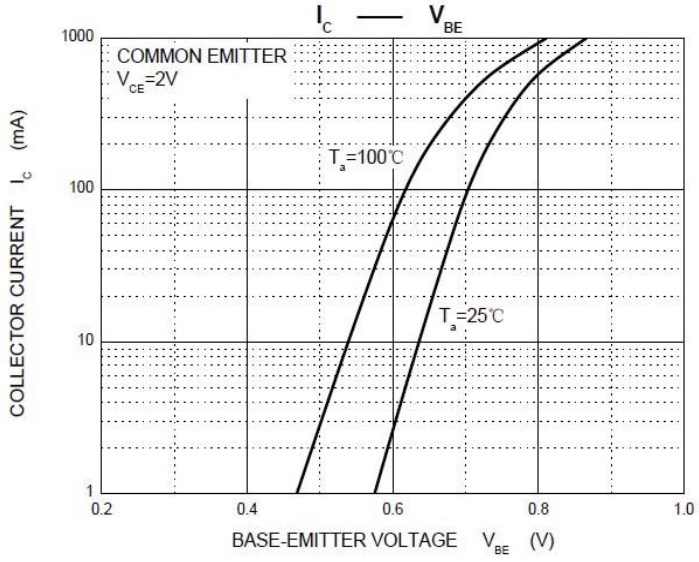
RATING AND CHARACTERISTICS CURVES (BCX54,BCX55,BCX56)

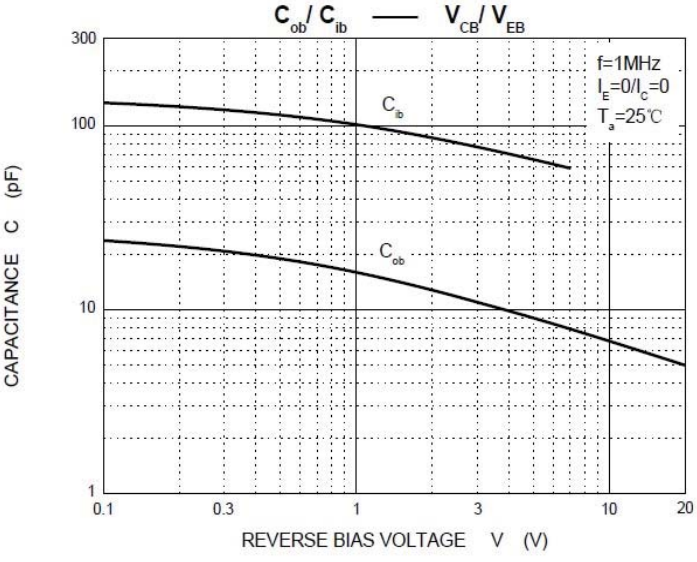




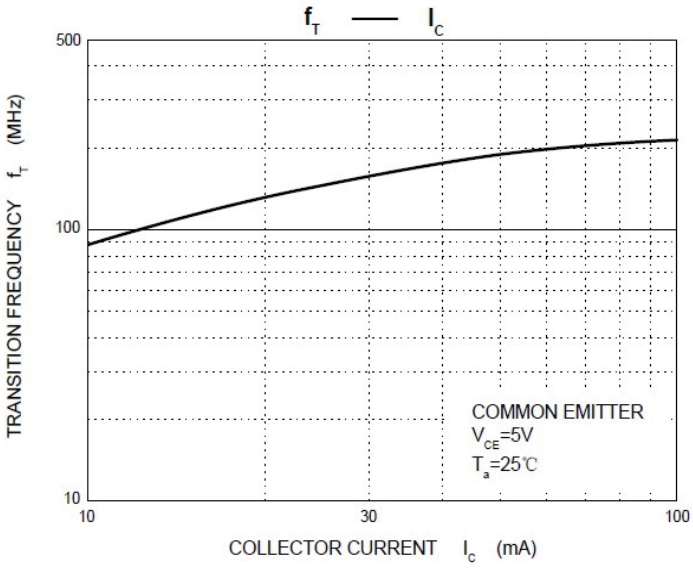


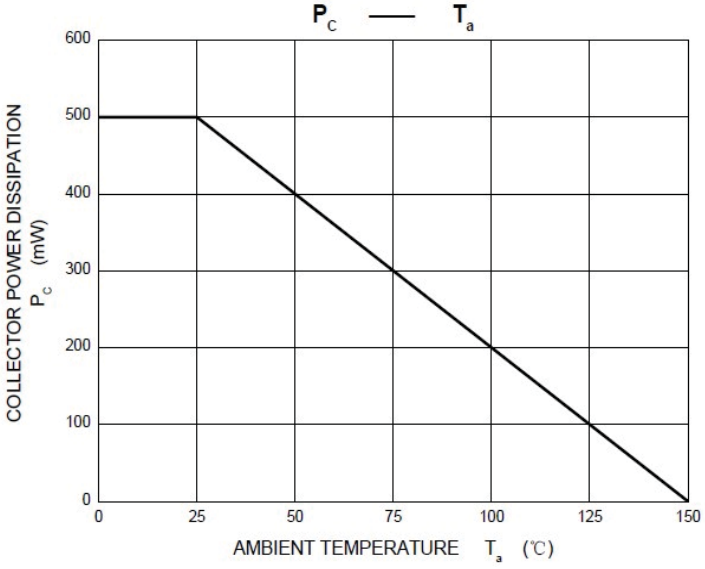




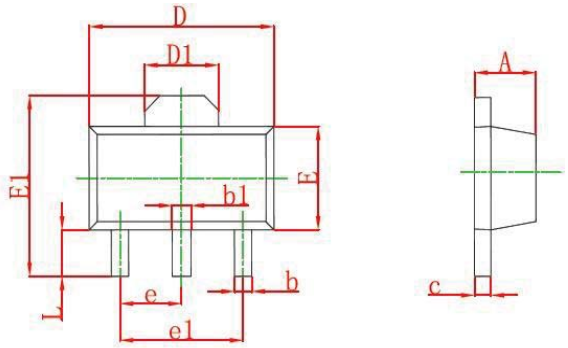


RATING AND CHARACTERISTICS CURVES (BCX54,BCX55,BCX56)





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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