

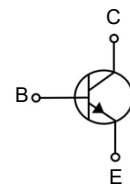
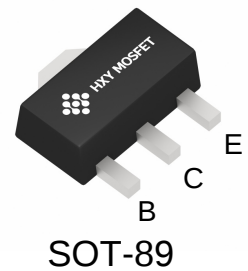


Features

- Collector Current: $I_C=1A$
- Power Dissipation of 1.5W

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BCP54	SOT-89	BCP54	1000
BCP55	SOT-89	BCP55	1000
BCP56	SOT-89	BCP56	1000



Maximum Ratings (Ta=25 unless otherwise noted)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	45 60 100	V
Collector-Emitter Voltage	V_{CEO}	45 60 80	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Collector Power Dissipation	P_C	1.5	W
Thermal Resistance From Junction To Ambient	R_{OJA}	83.3	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

Classification Of h_{FE}

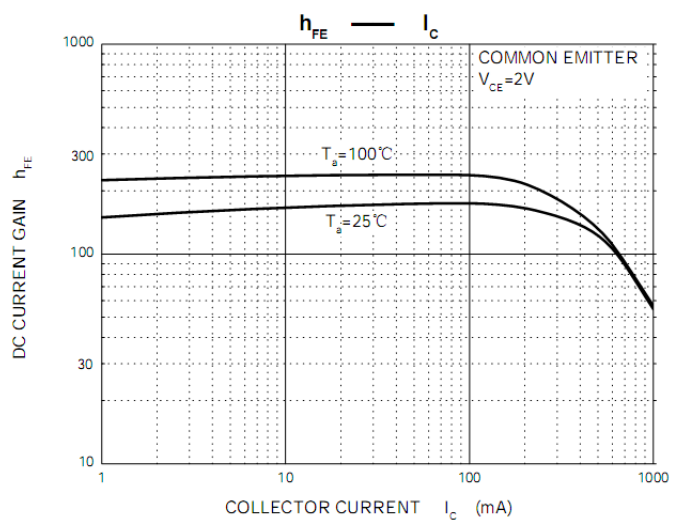
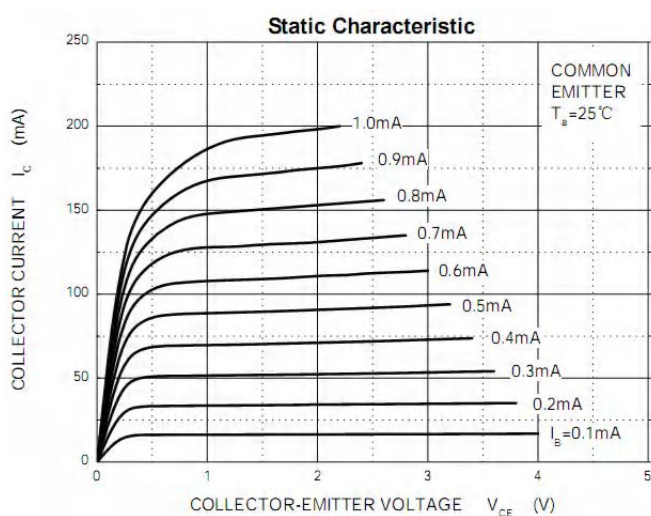
Rank	BCP54-10, BCP55-10, BCP56-10	BCP54-16, BCP55-16, BCP56-16
Range	63-160	100-250
Marking	BCP54-10, BCP55-10, BCP56-10	BCP54-16, BCP55-16, BCP56-16

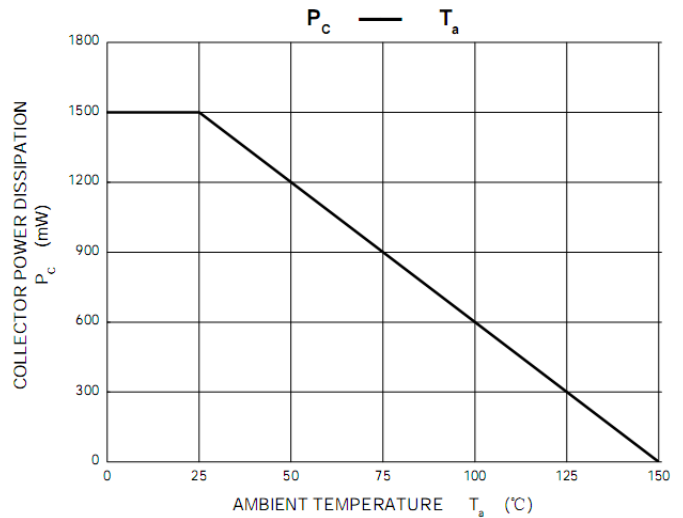
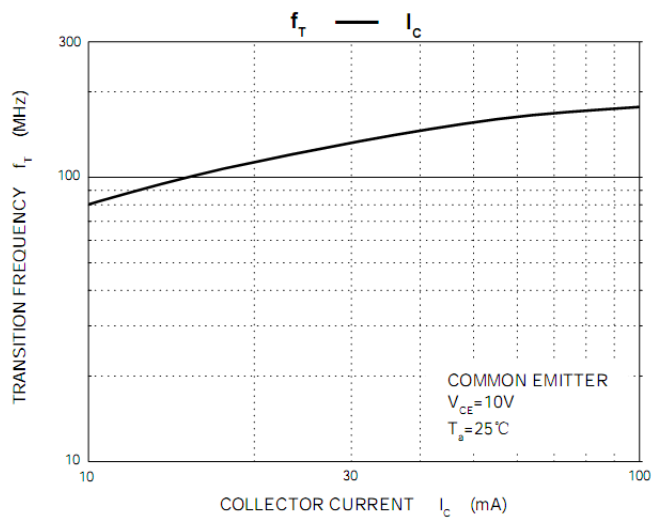
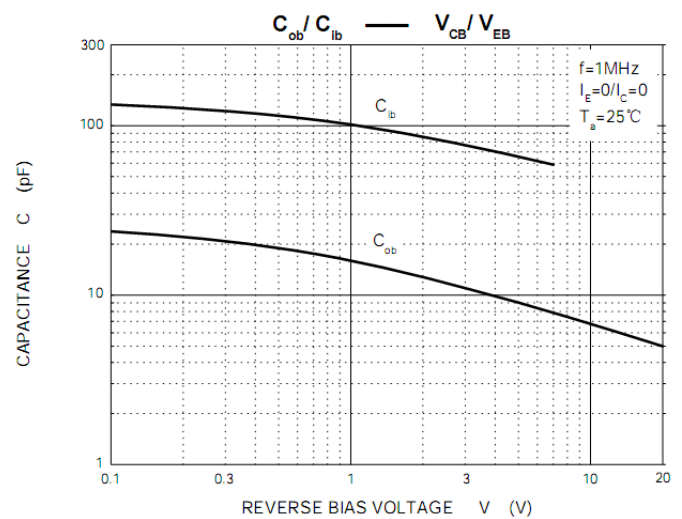
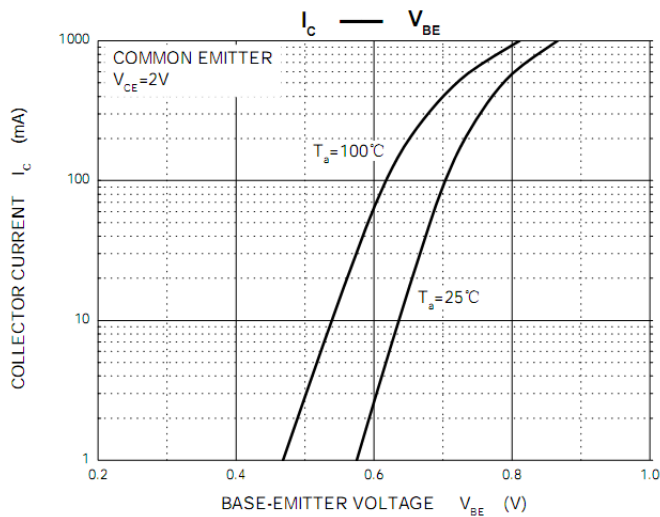
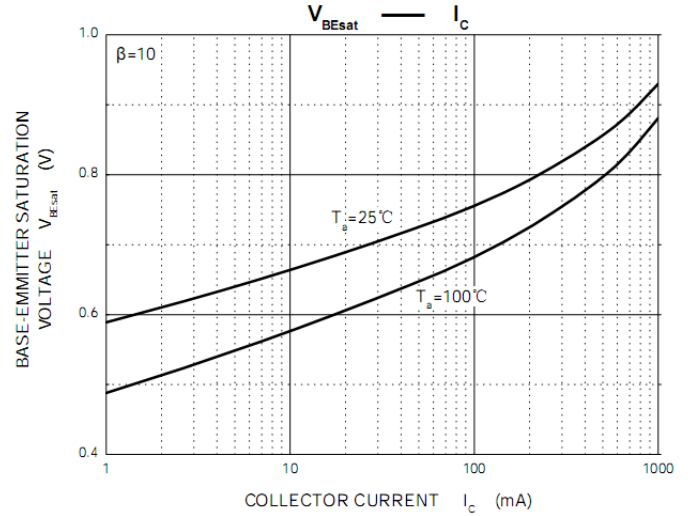
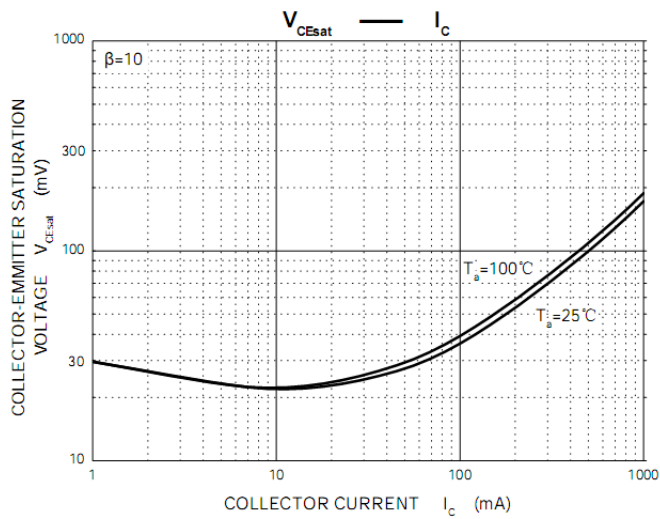


Electrical Characteristics($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BCP54 BCP55 BCP56	$V_{(BR)CBO}$ $I_C=0.1\text{mA}, I_E=0$	45 60 100		V
Collector-emitter breakdown voltage	BCP54 BCP55 BCP56	$V_{(BR)CEO}$ $I_C=10\text{mA}, I_B=0$	45 60 80		V
Base-emitter breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu\text{A}, I_C=0$	5		V
Collector cut-off current	I_{CBO}	$V_{CB}=30\text{V}, I_E=0$		100	nA
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=5\text{mA}$	25		
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=150\text{mA}$	63	250	
	$h_{FE(3)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	25		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=2\text{V}, I_C=500\text{mA}$		1	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	100		MHz

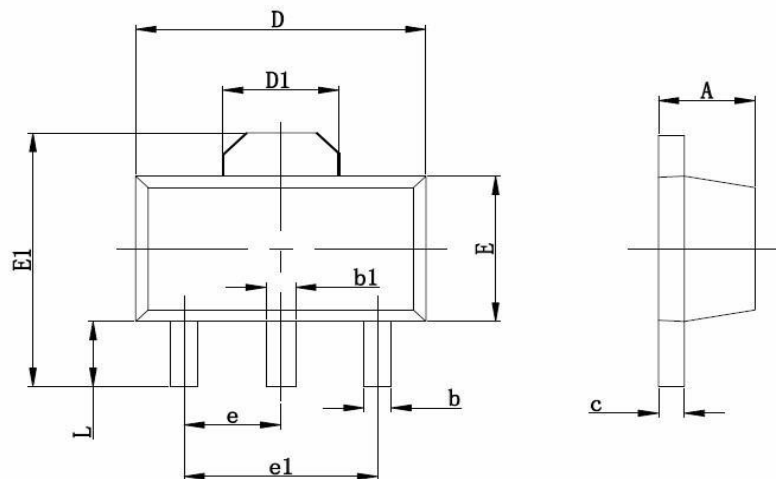
Typical Characteristics







SOT-89 Package Outline Dimensions



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



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