



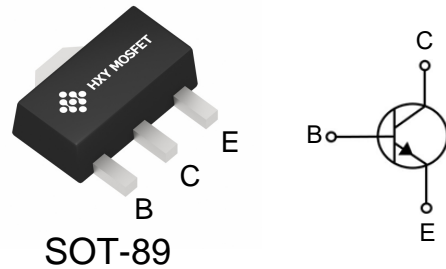
## Features

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

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BCP54/BCP55 BCP56	SOT-89	BCP5x	1000

x:From 4/5/6



SOT-89

## Maximum Ratings (Ta=25°C 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	$R_{\theta JA}$	95	°C/W
Junction Temperature	$T_j$	150	°C
Storage Temperature	$T_{stg}$	-55~+150	°C

## Electrical Characteristics(Ta=25°C unless otherwise specified)

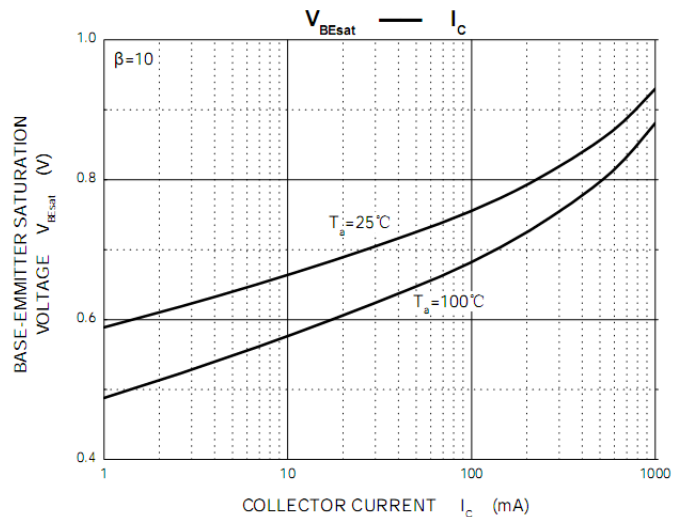
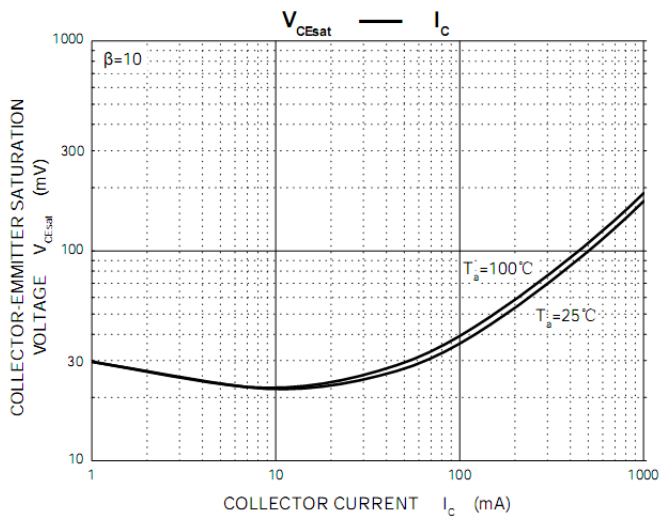
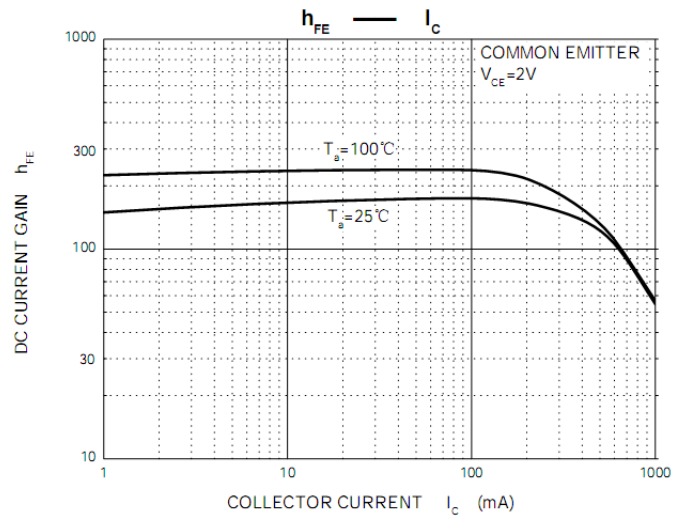
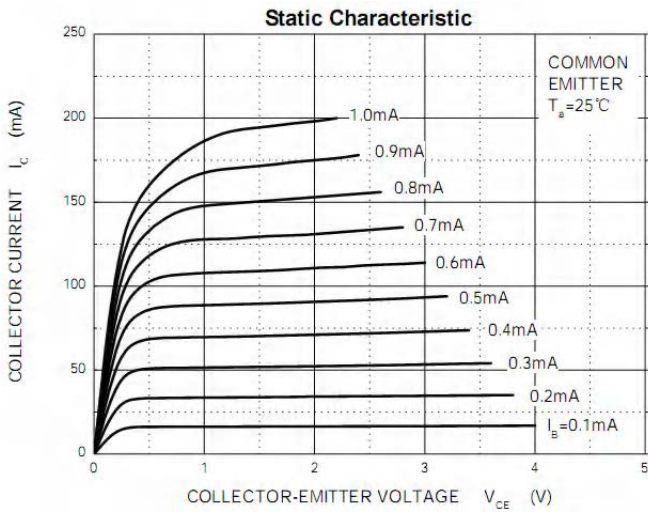
Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1mA, I_E = 0$	45 60 100		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	45 60 80		V
Base-emitter breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	5		V
Collector cut-off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

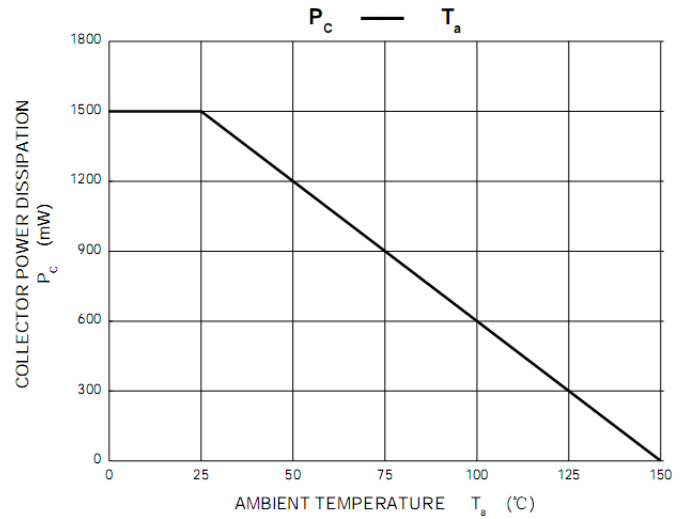
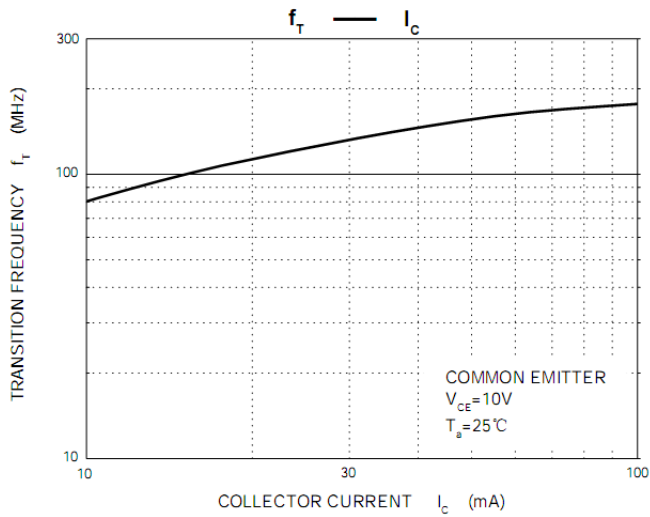
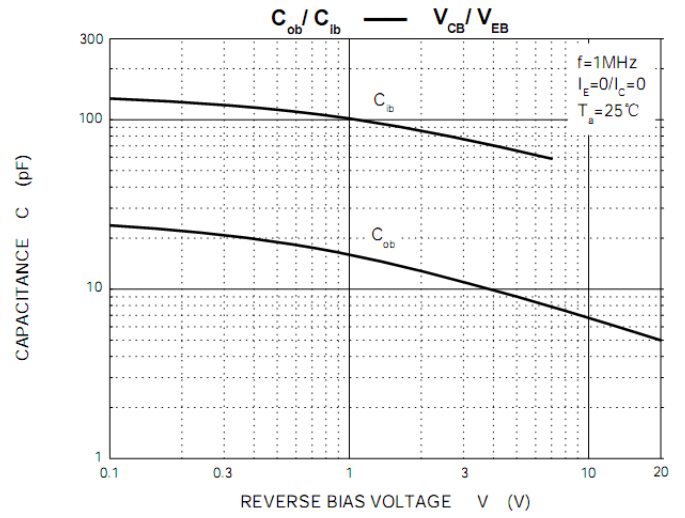
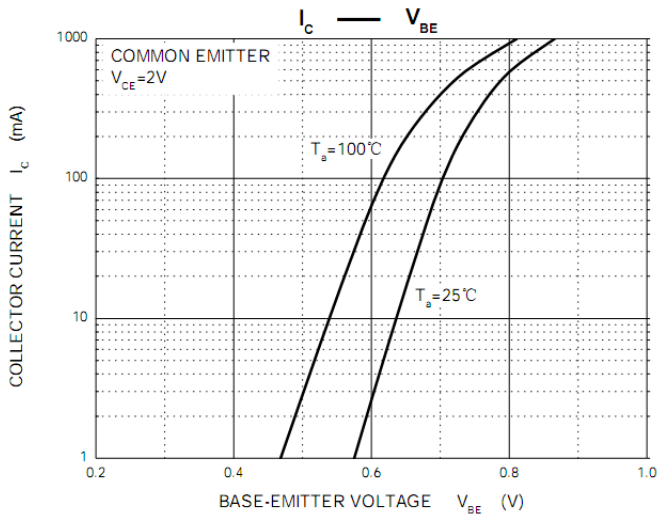


**Classification Of  $h_{FE}$**

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

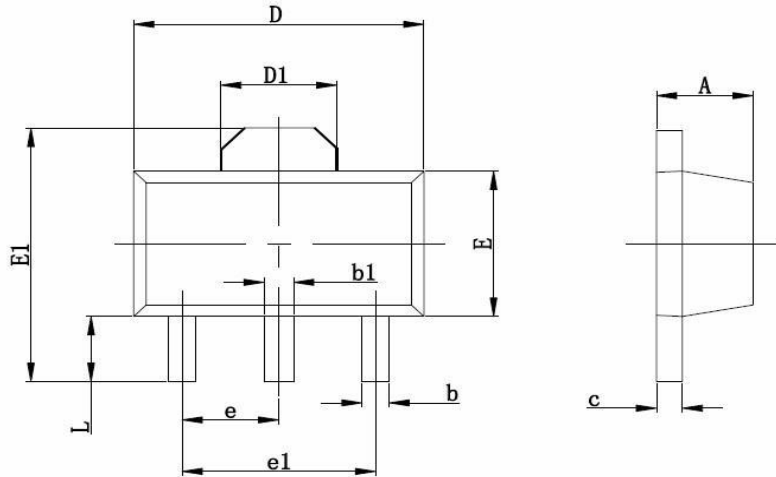
**Typical Characteristics**







### 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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