



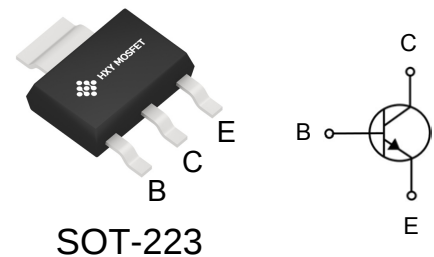
Features

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

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BCP5x	SOT-223	BCP5x	1000

x:From 4/5/6



Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V_{CBO}	BCP54 45	V
		BCP55 60	
		BCP56 100	
Collector-Emitter Voltage	V_{CEO}	BCP54 45	V
		BCP55 60	
		BCP56 80	
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	$R_{\theta JA}$	83.3	$^\circ\text{C/W}$
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55~+150	$^\circ\text{C}$

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

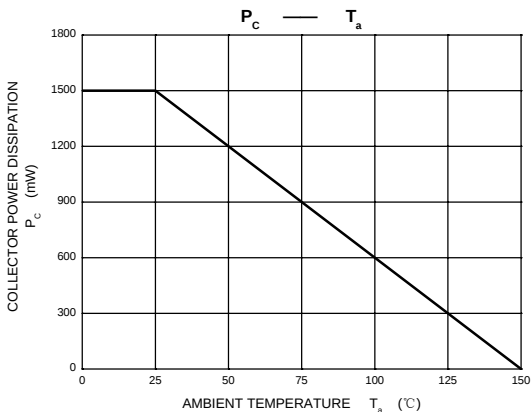
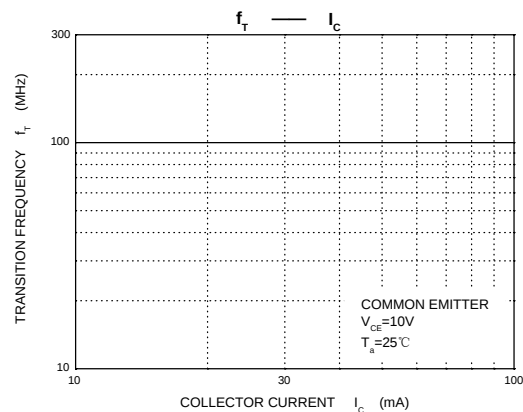
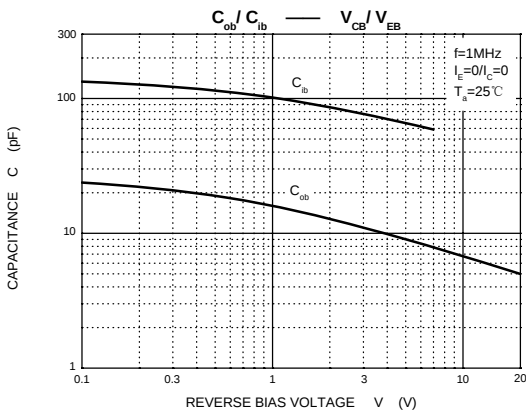
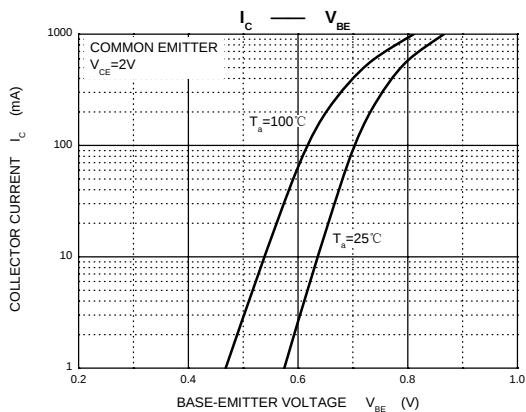
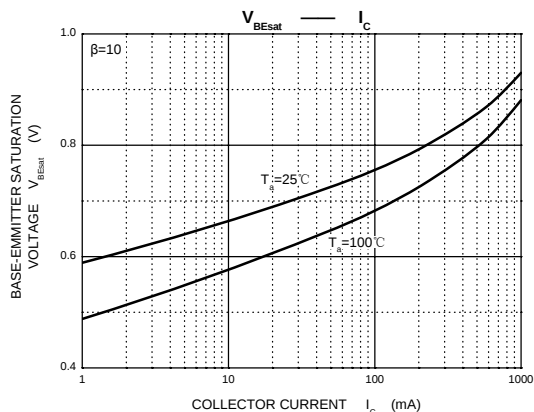
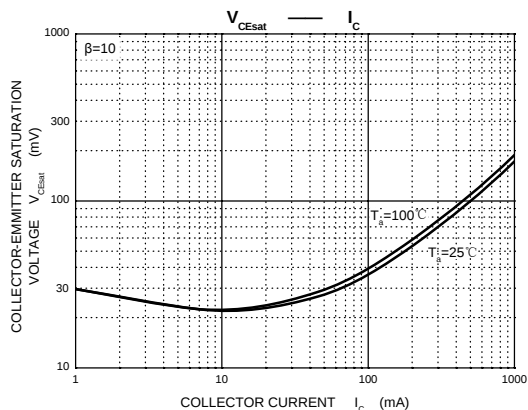
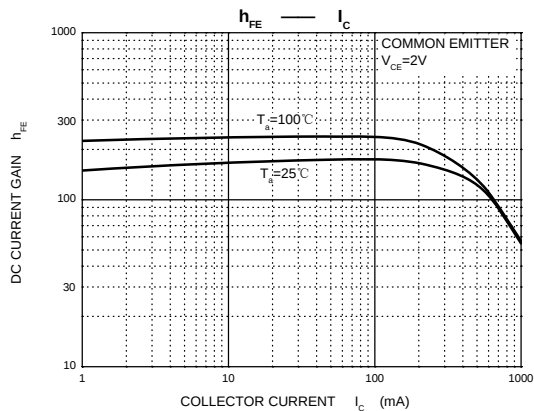
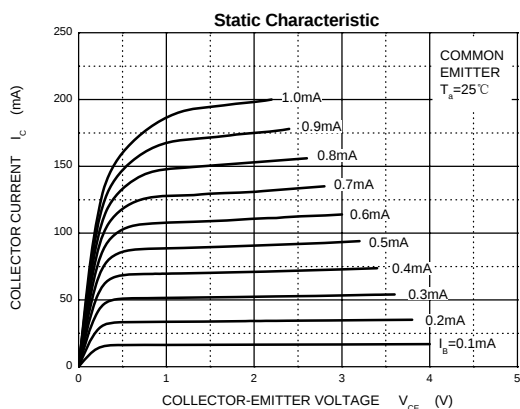


Electrical Characteristics(Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BCP54 BCP55 BCP56	$V_{(BR)CBO}$ $I_C = 0.1mA, I_E = 0$	45 60 100		V
Collector-emitter breakdown voltage	BCP54 BCP55 BCP56	$V_{(BR)CEO}$ $I_C = 10mA, I_B = 0$	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



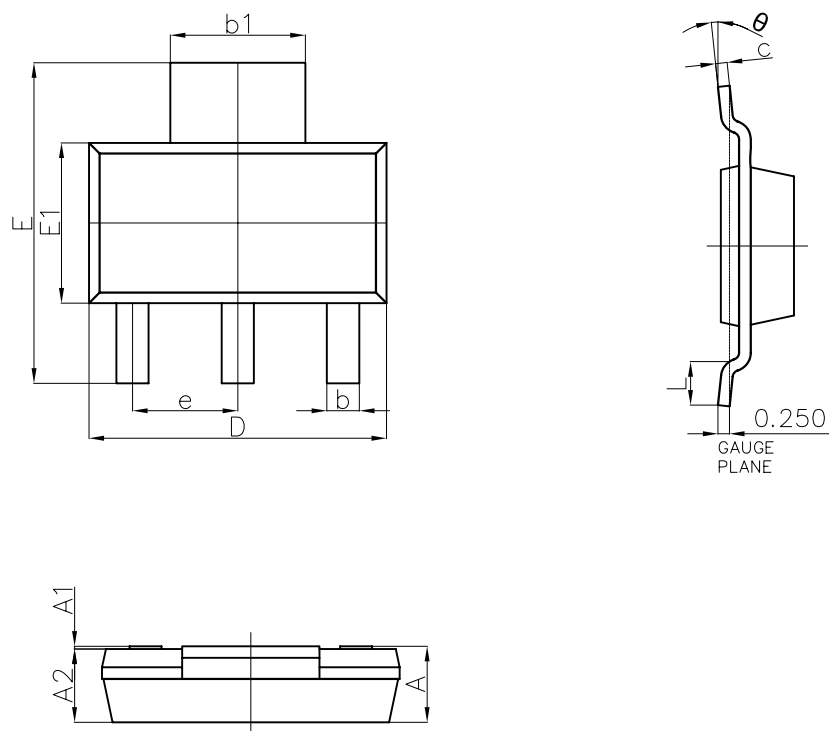
Typical Characteristics





Package Dimensions

SOT-223



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	—	1.800	—	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b_1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E_1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	—	0.030	—
θ	0°	10°	0°	10°



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