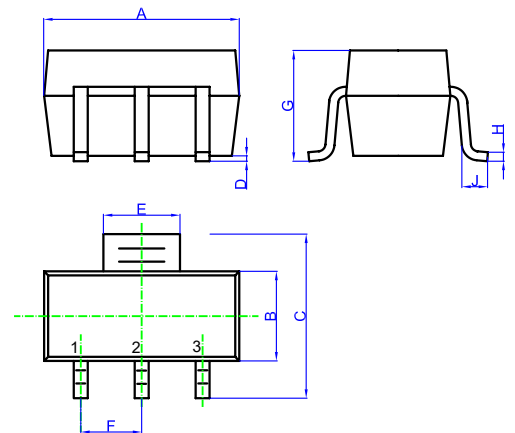




BCP54-10/16
BCP55-10/16
BCP56-10/16

NPN
Plastic-Encapsulate
Transistors

SOT-223



1.BASE
 2.COLLECTOR
 3.EMITTER

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.248	.264	6.30	6.70	
B	.130	.146	3.30	3.70	
C	.264	.287	6.70	7.30	
D	.001	.004	0.02	0.10	
E	.114	.122	2.90	3.10	
F	.091		2.30		
G	---	.071	---	1.80	
H	.009	.014	0.23	0.35	
J	.030	---	0.75	---	

Features

- For AF driver and output stages
- High collector current
- Low collector-emitter saturation voltage
- Complementary types: BCP51 ... BCP53 (PNP)
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ 25°C Unless Otherwise Specified

Charateristic	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	45	V
BCP54-10/16		60	
BCP55-10/16		100	
Collector-Emitter Voltage	V_{CEO}	45	V
BCP54-10/16		60	
BCP55-10/16		80	
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current-Continuous	I_C	1.0	A
Thermal Resistance Junction to Ambient	R_{thJA}	83.3	°C/W
Collector Power Dissipation	P_C	1.5	W
Operating & Storage Temperature	T_j, T_{STG}	-55~150	°C

BCP54-10/16 thru BCP56-10/16

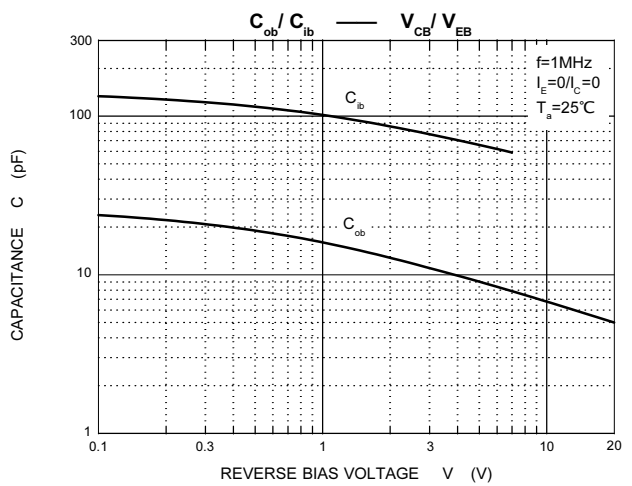
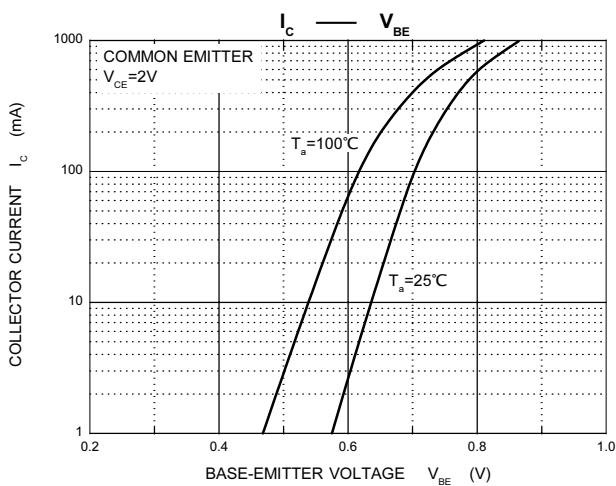
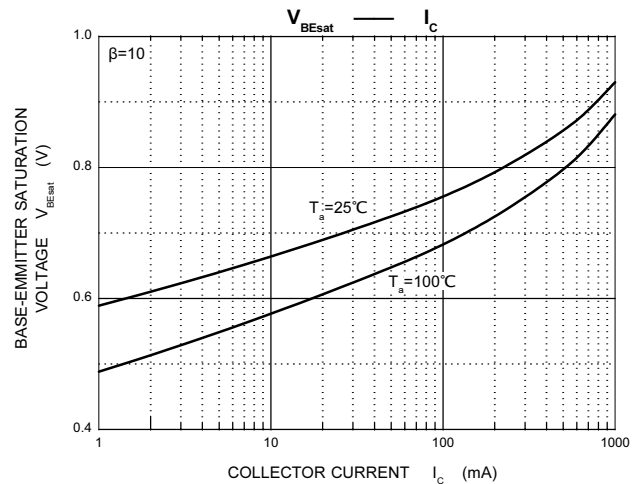
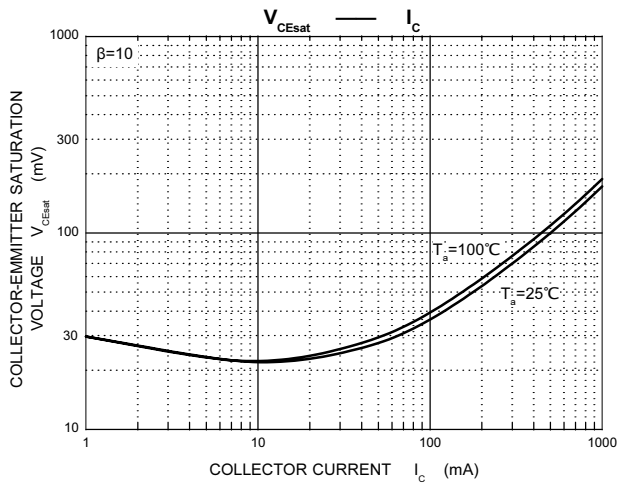
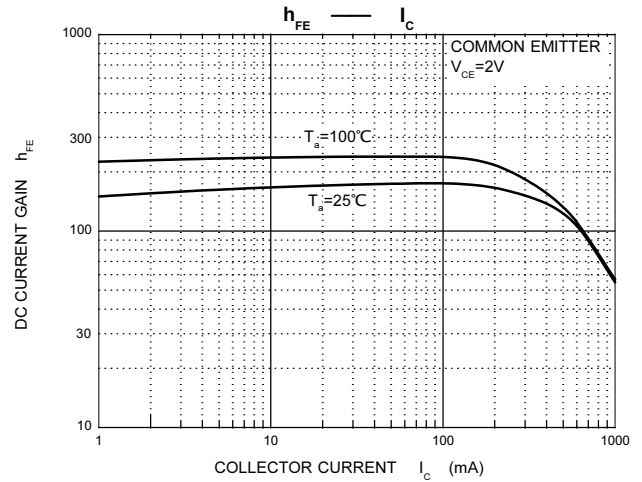
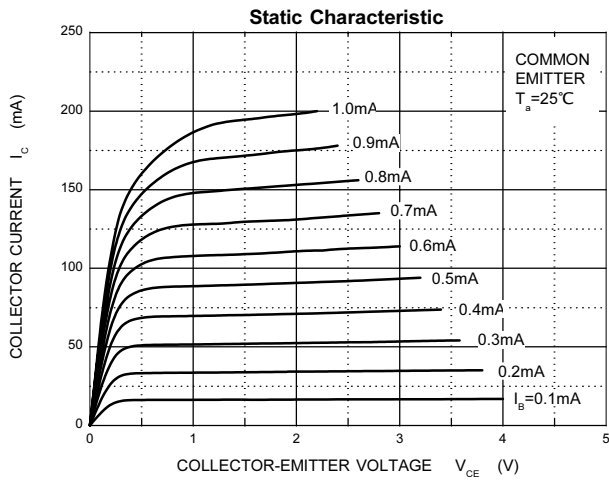
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	BCP54-10/16	I _C = 0.1mA, I _E =0	45		V
	BCP55-10/16		60		
	BCP56-10/16		100		
Collector-emitter breakdown voltage	BCP54-10/16	I _C = 10mA, I _B =0	45		V
	BCP55-10/16		60		
	BCP56-10/16		80		
Base-emitter breakdown voltage	V _{(BR)EBO}	I _C = 10μA, I _E =0	5		V
Collector cut-off current	I _{CBO}	V _{CB} = 30 V, 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 =150m A	63	250	
	h _{FE(3)}	V _{CE} = 2V, I _C =500m A	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 =500m A		1	V
Transition frequency	f _T	V _{CE} =10V, I _C =50mA, f=100MHz	100		MHz

CLASSIFICATION OF h_{FE(2)}

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

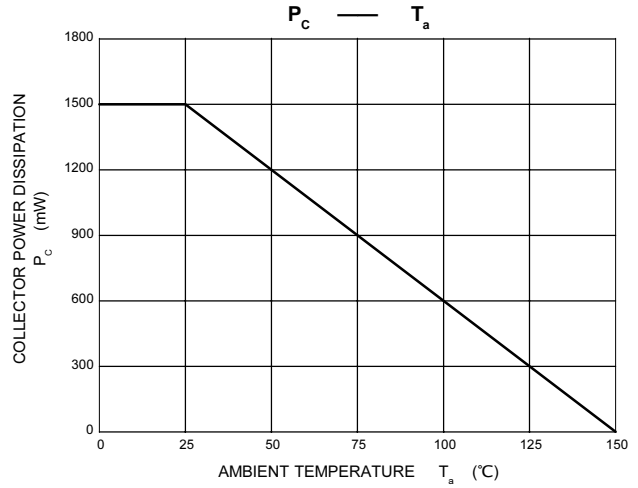
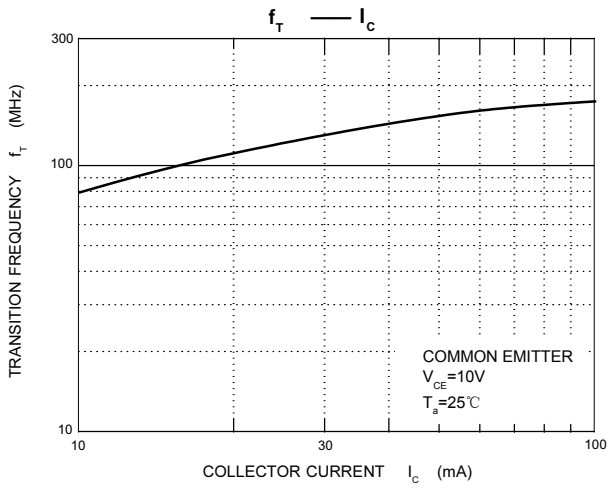
BCP54-10/16 thru BCP56-10/16



f — I

P — T

BCP54-10/16 thru BCP56-10/16





Micro Commercial Components

Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 2.5Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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