Micro Commercial Components

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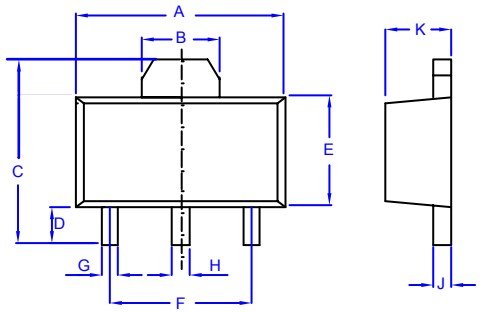
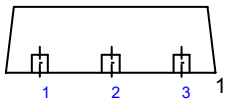
130 W Cochran St, Unit B
Simi Valley, CA 93065
Tel:818-701-4933

BCX56
BCX56-10
BCX56-16

NPN
Plastic-Encapsulate Transistors

SOT-89





1. BASE
2. COLLECTOR
3. EMITTER

DIMENSINS					
DIM	INCHES		MM		NOTES
	MIN	MAX	MIN	MAX	
A	.173	.181	4.39	4.60	
B	.061	-----	1.55	-----	REF.
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	-----	3.00	-----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

Features

- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Power Dissipation: P_{CM}=0.5W (T_{amb}=25℃)
- Collector Current: I_{CM}=1.0A
- Collector-Base Voltage: $V_{(BR)CBO}$=100V
- Marking : BCX56=BH, BCX56-10=BK, BCX56-16=BL
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Value	Unit
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	100	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	80	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	5	V
I_C	Collector Current DC	1.0	A
P_C	Collector Power Dissipation	0.5(Note1)	W
		0.95(Note2)	
		1.35(Note3)	
T_J	Junction Temperature Range	-55 to +150	°C
T_{STG}	Storage Temperature Range	-55 to +150	°C

[1] Device mounted on an FR4 Printed-Circuit Board (PCB), single-sided copper, tin-plated and standard footprint.

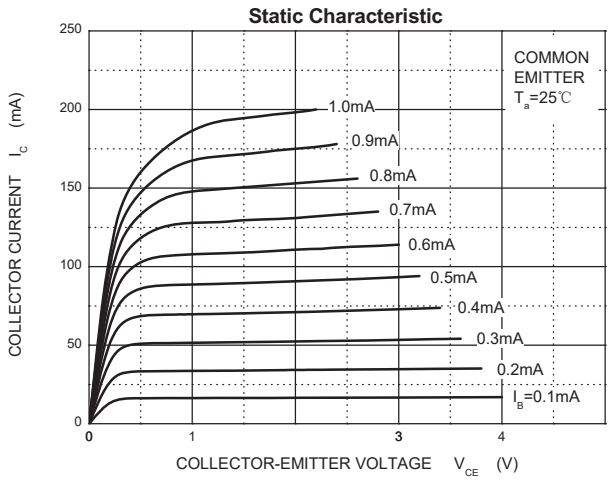
[2] Device mounted on an FR4 PCB, single-sided copper, tin-plated, mounting pad for collector 1 cm^2.

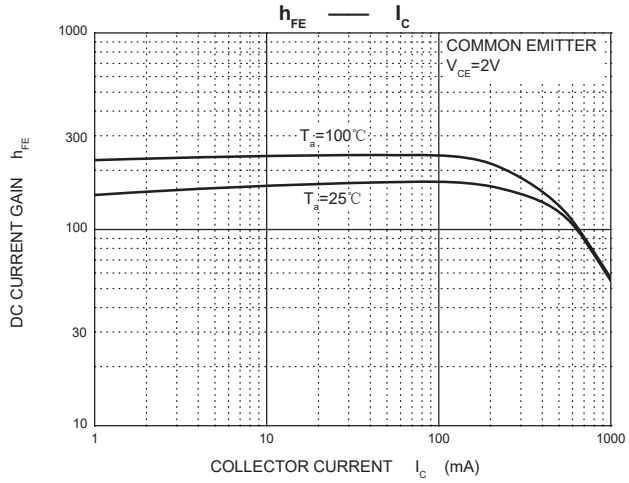
[3] Device mounted on an FR4 PCB, single-sided copper, tin-plated, mounting pad for collector 6 cm^2.

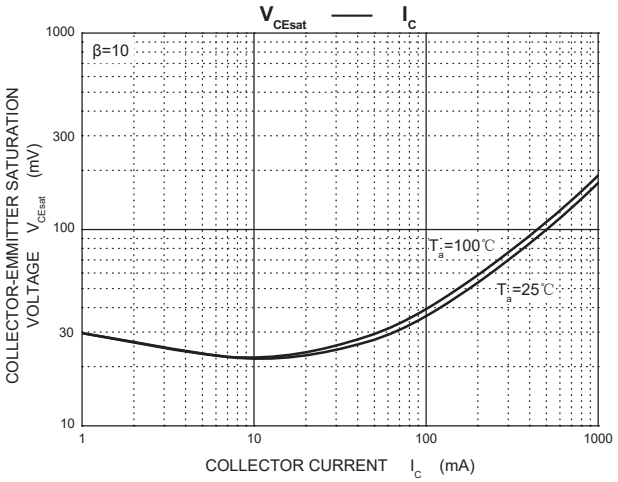
Electrical Characteristics @ 25°C Unless Otherwise Specified

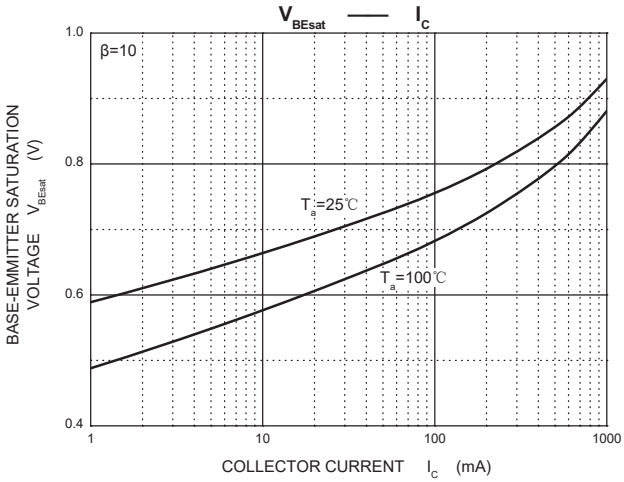
Symbol	Parameter	Min	Typ	Max	Units
OFF CHARACTERISTICS					
V_{CBO}	Collector-Base Voltage (I_C=100μAdc, I_E=0)	100	---	---	Vdc
V_{CEO}	Collector-Emitter Voltage (I_C=10mAdc, I_B=0)	80	---	---	Vdc
V_{EBO}	Emitter-Base Voltage (I_E=10μAdc, I_C=0)	5.0	---	---	Vdc
I_{CBO}	Collector Cutoff Current (V_{CB}=30Vdc, I_E=0)	---	---	0.1	μAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=5.0Vdc, I_C=0)	---	---	0.1	μAdc
$h_{FE(1)}$	DC Current Gain (V_{CE}=2.0Vdc, I_C=150mAdc)				
	BCX56	63	---	250	---
	BCX56-10	63	---	160	
	BCX56-16	100	---	250	
$h_{FE(2)}$	DC Current Gain (V_{CE}=2.0Vdc, I_C=5.0mAdc)	40	---	---	---
$h_{FE(3)}$	DC Current Gain (V_{CE}=2.0Vdc, I_C=500mAdc)	25	---	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=500mAdc,I_B=50mAdc)	---	---	0.5	Vdc
V_{BE}	Base-Emitter Voltage (I_C=500mAdc, V_{CE}=2.0Vdc)	---	---	1.0	Vdc
f_T	Transition Frequency (V_{CE}=100Vdc, I_C=50mAdc, f=100MHz)	130	---	---	MHz

Typical Characteristics









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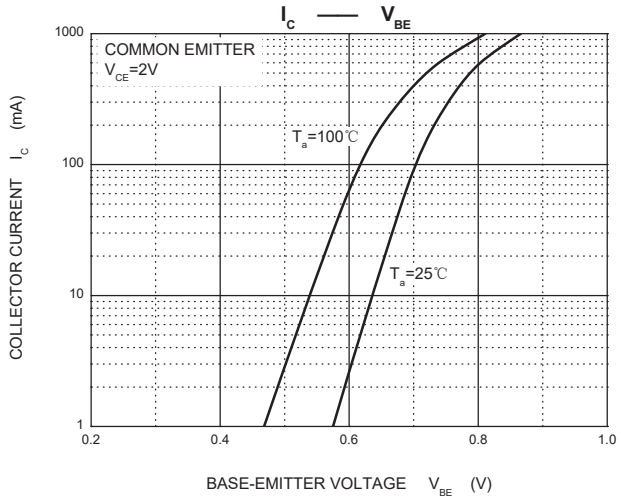

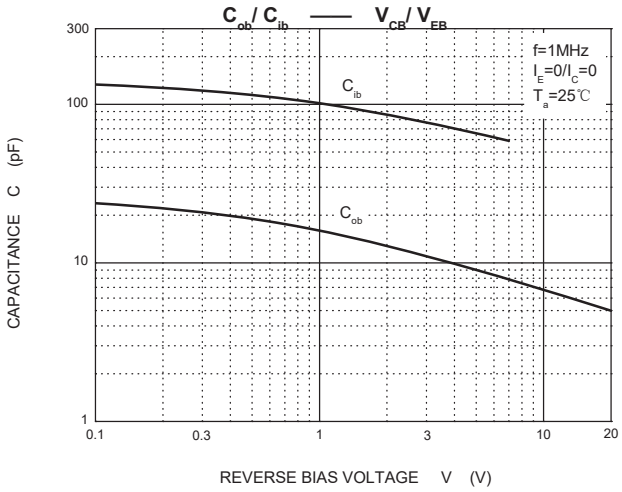

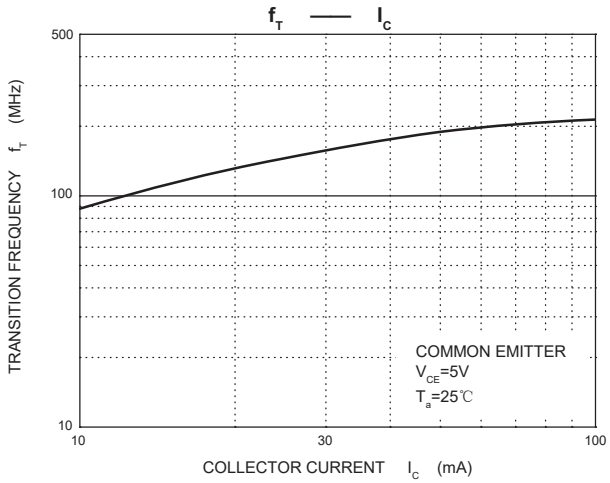

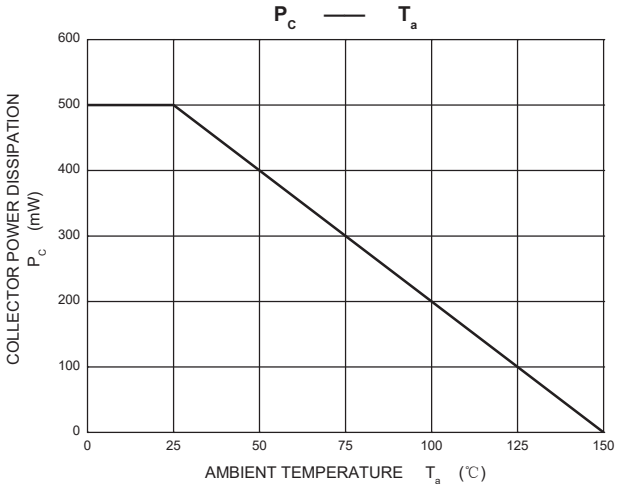

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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel:1Kpcs/Reel

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