



Micro Commercial Components



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

## 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:  $P_{CM}=0.5W$  ( $T_{amb}=25^{\circ}C$ )
- 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
- Moisture 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	$^{\circ}C$
$T_{STG}$	Storage Temperature Range	-55 to +150	$^{\circ}C$

[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<sup>2</sup>.

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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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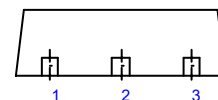
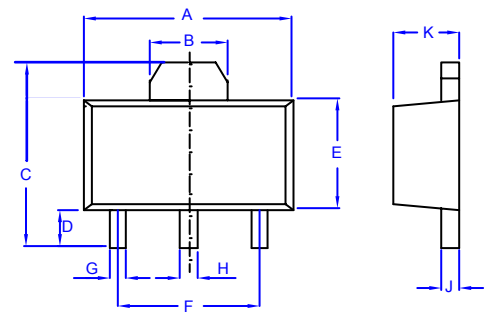
### OFF CHARACTERISTICS

V <sub>CBO</sub>	Collector-Base Voltage (I <sub>C</sub> =100μAdc, I <sub>E</sub> =0)	100	---	---	Vdc	
V <sub>CEO</sub>	Collector-Emitter Voltage (I <sub>C</sub> =10mAdc, I <sub>B</sub> =0)	80	---	---	Vdc	
V <sub>EBO</sub>	Emitter-Base Voltage (I <sub>E</sub> =10μAdc, I <sub>C</sub> =0)	5.0	---	---	Vdc	
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =30Vdc, I <sub>E</sub> =0)	---	---	0.1	μAdc	
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =5.0Vdc, I <sub>C</sub> =0)	---	---	0.1	μAdc	
h <sub>FE(1)</sub>	DC Current Gain (V <sub>CE</sub> =2.0Vdc, I <sub>C</sub> =150mAdc)	BCX56	63	---	250	---
		BCX56-10	63	---	160	
		BCX56-16	100	---	250	
h <sub>FE(2)</sub>	DC Current Gain (V <sub>CE</sub> =2.0Vdc, I <sub>C</sub> =5.0mAdc)	40	---	---	---	
h <sub>FE(3)</sub>	DC Current Gain (V <sub>CE</sub> =2.0Vdc, I <sub>C</sub> =500mAdc)	25	---	---	---	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =500mAdc, I <sub>B</sub> =50mAdc)	---	---	0.5	Vdc	
V <sub>BE</sub>	Base-Emitter Voltage (I <sub>C</sub> =500mAdc, V <sub>CE</sub> =2.0Vdc)	---	---	1.0	Vdc	
f <sub>T</sub>	Transition Frequency (V <sub>CE</sub> =100Vdc, I <sub>C</sub> =50mAdc, f=100MHz)	130	---	---	MHz	

BCX56  
BCX56-10  
BCX56-16

NPN  
Plastic-Encapsulate  
Transistors

SOT-89

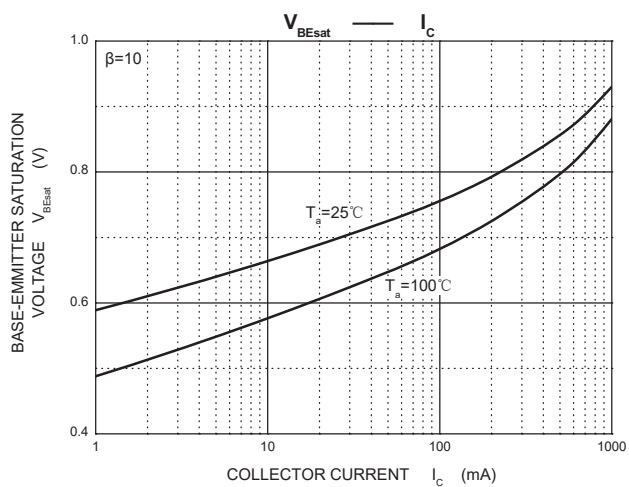
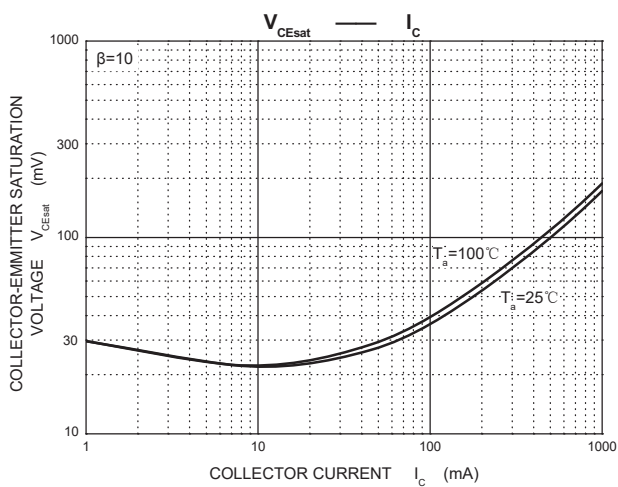
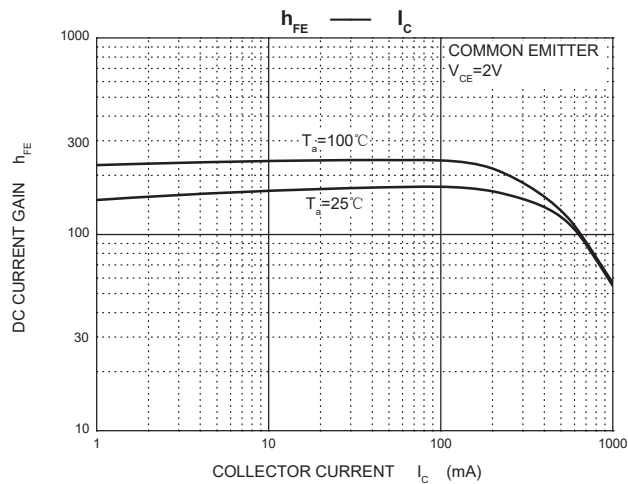
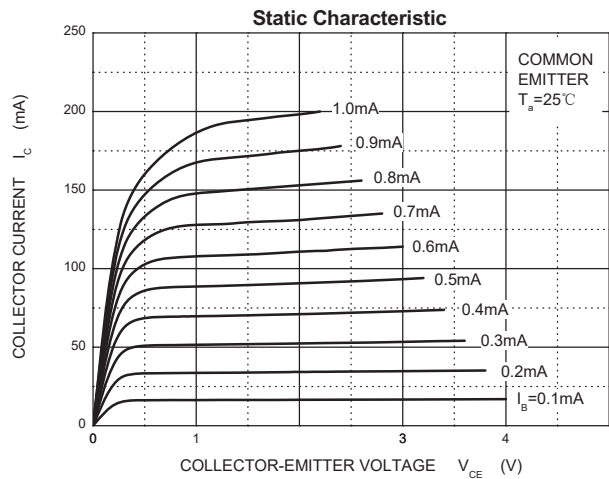


1. BASE
2. COLLECTOR
3. EMITTER

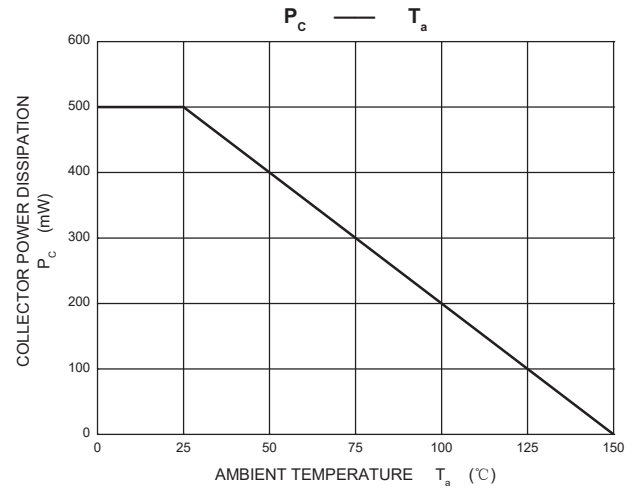
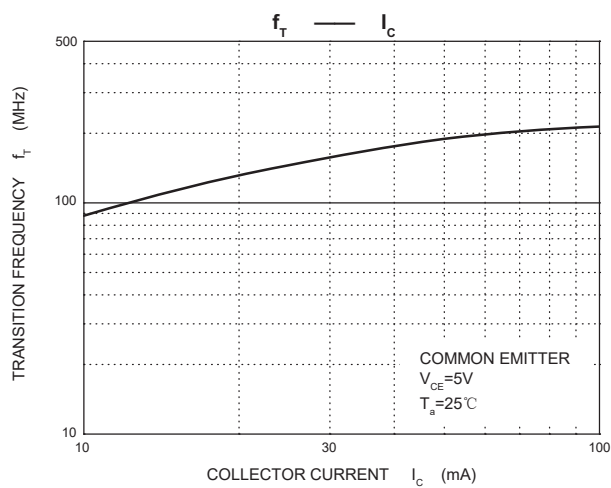
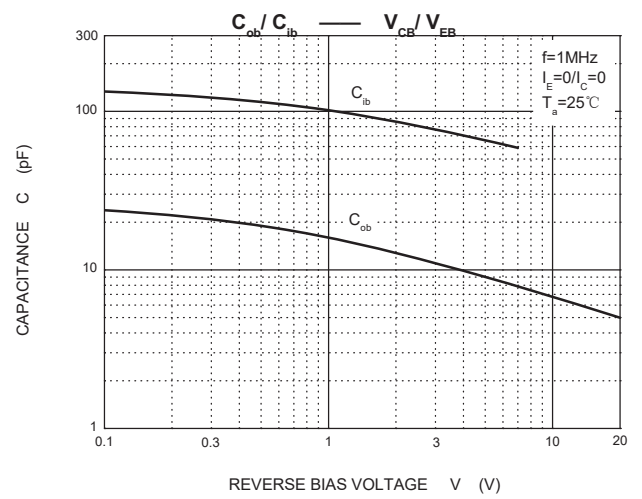
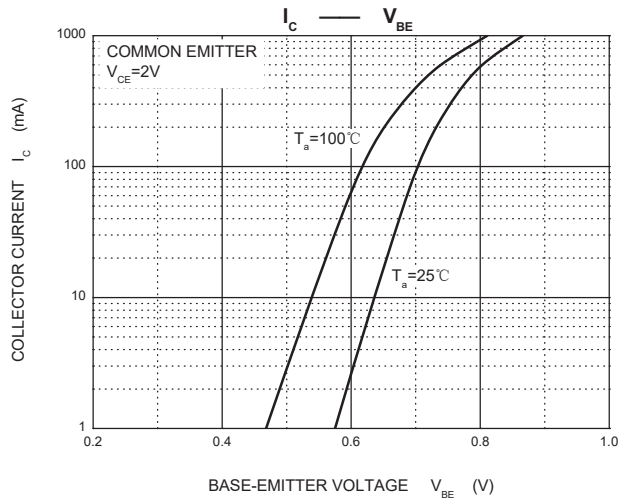
DIM	DIMENSINS				NOTES
	INCHES		MM		
A	.173	.181	4.39	4.60	
B	.061	----	1.55	----	REF.
C	.154	.165	3.91	4.25	
D	.031	.039	0.80	1.00	
E	.092	.100	2.34	2.54	
F	.118	----	3.00	----	TYP
G	.013	.019	0.33	0.48	
H	.015	.021	0.38	0.53	
J	.015	.016	0.38	0.41	
K	.055	.063	1.40	1.60	

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## Typical Characteristics



## Typical Characteristics



## Ordering Information :

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

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

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