



Micro Commercial Components

Micro Commercial Components  
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## 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:  $V_{(BR)CBO}=-45V$
- Marking Code: BCX51=AA, BCX51-10=AC, BCX51-16=AD
- 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	-45	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	-45	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	W
$T_J$	Junction Temperature Range	-55 to +150	$^{\circ}C$
$T_{STG}$	Storage Temperature Range	-55 to +150	$^{\circ}C$

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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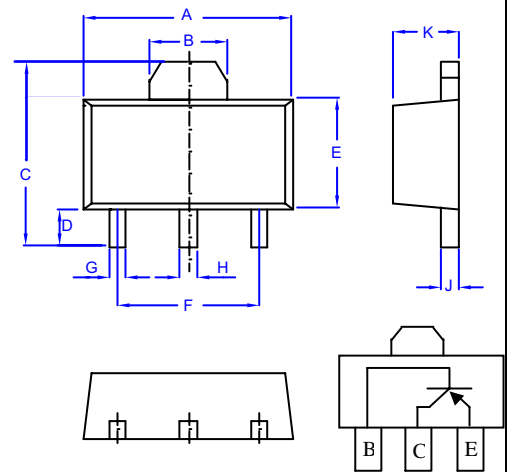
### OFF CHARACTERISTICS

$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=-100\mu A, I_E=0$ )	-45	---	---	V
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ( $I_C=-1mA, I_B=0$ )	-45	---	---	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=10\mu A, I_C=0$ )	-5	---	---	V
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=-30V, I_E=0$ )	---	---	-0.1	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=-5.0V, I_C=0$ )	---	---	-0.1	$\mu A$
$h_{FE(1)}$	DC Current Gain ( $V_{CE}=-2.0V, I_C=-150mA$ )				
	BCX51	63	---	250	---
	BCX51-10	63	---	160	---
	BCX51-16	100	---	250	---
$h_{FE(2)}$	DC Current Gain ( $V_{CE}=2.0V, I_C=-5.0mA$ )	63			
$h_{FE(3)}$	DC Current Gain ( $V_{CE}=-2.0V, I_C=-500mA$ )	40			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=-500mA, I_B=-50mA$ )	---	---	-0.5	V
$V_{BE(on)}$	Base-Emitter Voltage ( $I_C=-500mA, V_{CE}=-2.0V$ )	---	---	-1	V
$f_T$	Transition Frequency ( $V_{CE}=-5V, I_C=-10mA, f=100MHz$ )	50	---	---	MHz

# BCX51 BCX51-10 BCX51-16

## PNP Plastic-Encapsulate Transistors

## SOT-89



DIM	DIMENSIONS				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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### 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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