



Micro Commercial Components



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BCX51 BCX51-10 BCX51-16

PNP Plastic-Encapsulate Transistors

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	$^{\circ}C$

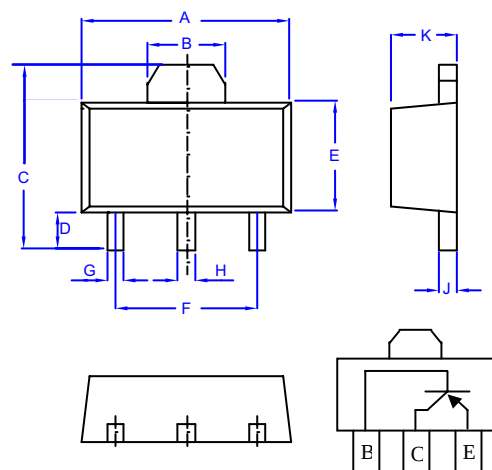
Electrical Characteristics @ 25°C Unless Otherwise Specified

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	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-5.0V$, $I_C=0$)	---	---	-0.1	μA
$h_{FE(1)}$	DC Current Gain ($V_{CE}=-2.0V$, $I_C=-150mA$)	BCX51 63 BCX51-10 63 BCX51-16 100	---	250 160 250	---
$h_{FE(2)}$	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

SOT-89



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	

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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