



**BCX54
 BCX54-10
 BCX54-16**

**NPN
 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-Base Voltage: $V_{(BR)CBO}=100V$
- Marking : BCX54=BA, BCX54-10=BC, BCX54-16=BD
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Maximum Ratings

Symbol	Rating	Value	Unit
V_{CEO}	Collector-Emitter Voltage	45	V
V_{CBO}	Collector-Base Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current DC	1.0	A
I_{CM}	Peak Collector Current, single pulse < 1mS	2.0	A
P_C	Collector Power Dissipation	0.5	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{STG}	Storage Temperature	-55 to +150	$^{\circ}C$

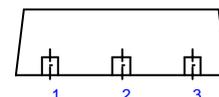
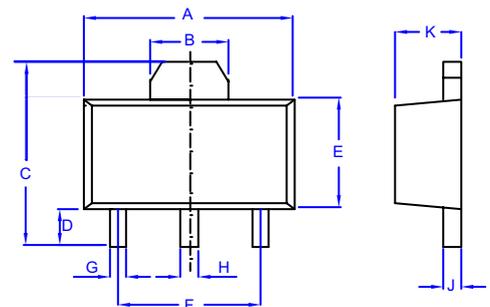
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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OFF CHARACTERISTICS

V_{CBO}	Collector-Base Voltage ($I_C=100\mu A_{dc}$, $I_E=0$)	45	---	---	Vdc
V_{CEO}	Collector-Emitter Voltage ($I_C=10mAdc$, $I_B=0$)	45	---	---	Vdc
V_{EBO}	Emitter-Base Voltage ($I_E=100\mu A_{dc}$, $I_C=0$)	5.0	---	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=30Vdc$, $I_E=0$)	---	---	0.1	μA_{dc}
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0Vdc$, $I_C=0$)	---	---	0.1	μA_{dc}
$h_{FE(1)}$	DC Current Gain ($V_{CE}=2.0Vdc$, $I_C=150mAdc$)				
	BCX54	63	---	250	---
	BCX54-10	63	---	160	---
	BCX54-16	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
$V_{BE(sat)}$	Base-Emitter Voltage ($I_C=500mAdc$, $V_{CE}=2.0Vdc$)	---	---	1.0	Vdc
f_T	Transition Frequency ($V_{CE}=5Vdc$, $I_C=10mAdc$, $f=100MHz$)	---	130	---	MHz

SOT-89



1. BASE
2. COLLECTOR
3. EMITTER

DIM	DIMENSIONS				NOTES
	INCHES		MM		
	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	



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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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