



ShenzhenTaimaoTechnology Co.,Ltd.

TO-92 Plastic-Encapsulate Transistors

BCX38 TRANSISTOR (NPN)

FEATURES

- High DC Current Gain

MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

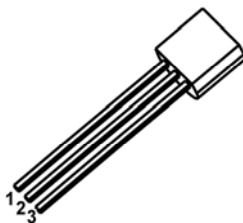
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	80	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	10	V
I_C	Collector Current -Continuous	0.8	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C}/\text{W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

TO - 92

1.EMITTER

2.BASE

3.COLLECTOR



ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=0.01\text{mA}, I_E=0$	80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=10\text{mA}, I_B=0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=0.01\text{mA}, I_C=0$	10			V
Collector cut-off current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=8\text{V}, I_C=0$			0.1	μA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=5\text{V}, I_C=100\text{mA}$				
		BCX38A	500			
		BCX38B	2000			
		BCX38C	5000			
	$h_{FE(2)}^*$	$V_{CE}=5\text{V}, I_C=500\text{mA}$				
		BCX38A	1000			
		BCX38B	4000			
		BCX38C	10000			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C=800\text{mA}, I_B=8\text{mA}$			1.25	V
Base-emitter voltage	V_{BE}^*	$I_C=800\text{mA}, V_{CE}=5\text{V}$			1.8	V

*Pulse test