

TO-92 Plastic-Encapsulate Transistors

BC212 TRANSISTOR (PNP)

FEATURES

- General Purpose Switching and Amplification.

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

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_c	Collector Current -Continuous	-0.1	A
P_c	Collector Power Dissipation	0.35	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	357	$^\circ\text{C}/\text{W}$
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^\circ\text{C}$

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

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.01\text{mA}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -2\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.01\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30\text{V}, I_E = 0$			-15	nA
Collector cut-off current	I_{CEO}	$V_{CE} = -30\text{V}, I_B = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}, I_C = 0$			-15	nA
DC current gain	h_{FE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	BC212	140		600
			BC212B	140		400
			BC212C	350		600
Collector-emitter saturation voltage	$V_{CE(\text{sat})}$	$I_C = -100\text{mA}, I_B = -5\text{mA}$			-0.6	V
Base-emitter saturation voltage	$V_{BE(\text{sat})}$	$I_C = -100\text{mA}, I_E = -5\text{mA}$			-1.2	V
Base-emitter voltage	V_{BE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$			-0.72	V
Transition frequency	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$	200			MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_C = 0, f = 1\text{MHz}$			6	pF

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1.EMITTER

2.BASE

3.COLLECTOR 1 2 3