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Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

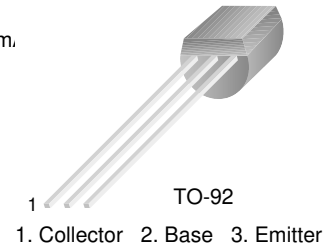
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



BC212

PNP General Purpose Amplifier

- This device is designed for general purpose amplifier application at collector currents to 300m.
- Sourced from process 68.



Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
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 (DC)	300	mA
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 ~ 150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES:

- 1) These ratings are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation	625	mW
	Derate above 25°C	5.0	mW/ $^\circ\text{C}$
$R_{\theta JC}$	Thermal Resistance, Junction to Case	83.3	$^\circ\text{C}/\text{W}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	200	$^\circ\text{C}/\text{W}$

*Device mounted on FR-4 PCB 1.6" X 1.6" X 0.06".

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Voltage	$I_C = 10\mu\text{A}$	60			V
BV_{CEO}	Collector-Emitter Voltage	$I_C = 2\text{mA}$	50			V
BV_{EBO}	Emitter-Base Voltage	$I_E = 10\mu\text{A}$	5			V
I_{EBO}	Emitter Cut-off Current	$V_{EB} = 4\text{V}$			15	nA
I_{CBO}	Collector Cut-off Current	$V_{CB} = 30\text{V}$			15	nA
h_{FE}	DC Current Gain	$V_{CE} = 5\text{V}, I_C = 10\mu\text{A}$	40			
		$V_{CE} = 5\text{V}, I_C = 2\text{mA}$	60			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 100\text{mA}, I_B = 5\text{mA}$			0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 100\text{mA}, I_B = 5\text{mA}$			1.4	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = 5\text{V}, I_C = 2\text{mA}$	0.6		0.72	V
C_{ob}	Output Capacitance	$V_{CE} = 10\text{V}, f = 1\text{MHz}$			6	pF




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