

BC212  
BC212A  
BC212B

SILICON  
PNP TRANSISTORS



www.centrasemi.com

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR BC212 series are silicon PNP transistors designed for low noise, high gain amplifier applications.



TO-92 CASE

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	SYMBOL		UNITS
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	50	V
Emitter-Base Voltage	$V_{EBO}$	5.0	V
Continuous Collector Current	$I_C$	200	mA
Power Dissipation	$P_D$	300	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\Theta_{JA}$	416	$^\circ\text{C}/\text{W}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$  unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
$I_{CBO}$	$V_{CB}=30\text{V}$		15	nA
$I_{EBO}$	$V_{EB}=4.0\text{V}$		15	nA
$BV_{CBO}$	$I_C=10\mu\text{A}$	60		V
$BV_{CEO}$	$I_C=2.0\text{mA}$	50		V
$BV_{EBO}$	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=500\mu\text{A}$		0.25	V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		0.60	V
$V_{BE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		1.4	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=2.0\text{mA}$	0.60	0.72	V
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=2.0\text{mA}$ (BC212)	60	400	
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=2.0\text{mA}$ (BC212A)	100	300	
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=2.0\text{mA}$ (BC212B)	200	400	
$f_T$	$V_{CE}=5.0\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	200		MHz
$C_{ob}$	$V_{CB}=10\text{V}, I_C=0, f=1.0\text{MHz}$		6.0	pF
NF	$V_{CE}=5.0\text{V}, I_C=200\mu\text{A}, f=1.0\text{kHz}, R_S=2.0\text{k}\Omega$		10	dB

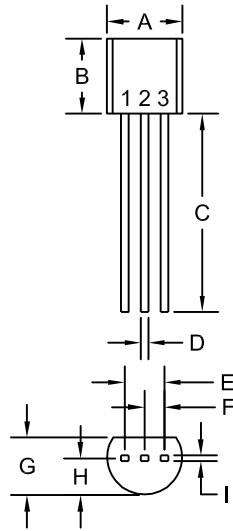
R1 (19-May 2017)

BC212  
 BC212A  
 BC212B

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TO-92 CASE - MECHANICAL OUTLINE



R1

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.175	0.205	4.45	5.21
B	0.170	0.210	4.32	5.33
C	0.500	-	12.70	-
D	0.016	0.022	0.41	0.56
E	0.100		2.54	
F	0.050		1.27	
G	0.125	0.165	3.18	4.19
H	0.080	0.105	2.03	2.67
I	0.015		0.38	

TO-92 (REV: R1)

LEAD CODE:

- 1) Collector
- 2) Base
- 3) Emitter

MARKING:

FULL PART NUMBER

R1 (19-May 2017)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix " TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix " PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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