

BC337 SERIES
SILICON
NPN TRANSISTORS



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR BC337 series devices are silicon NPN transistors designed for general purpose amplifier and switching applications.



MARKING: FULL PART NUMBER

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	800	mA
Power Dissipation	P_D	625	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance	Θ_{JA}	200	$^\circ\text{C}/\text{W}$
Thermal Resistance	Θ_{JC}	83.3	$^\circ\text{C}/\text{W}$

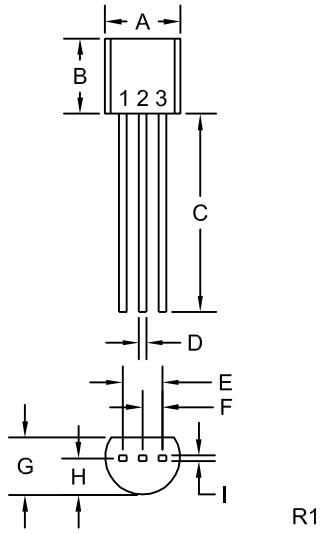
ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CES}	$V_{CE}=45\text{V}$			100	nA
I_{CBO}	$V_{CB}=30\text{V}$			100	nA
I_{EBO}	$V_{EB}=4.0\text{V}$			100	nA
BV_{CES}	$I_C=100\mu\text{A}$	50			V
BV_{CEO}	$I_C=10\text{mA}$	45			V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0			V
$V_{CE(\text{SAT})}$	$I_C=500\text{mA}, I_B=50\text{mA}$			0.7	V
$V_{BE(\text{ON})}$	$V_{CE}=1.0\text{V}, I_C=300\text{mA}$			1.2	V
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$ (BC337)	100		630	
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$ (BC337-16)	100		250	
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$ (BC337-25)	160		400	
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$ (BC337-40)	250		630	
h_{FE}	$V_{CE}=1.0\text{V}, I_C=300\text{mA}$	60			
f_T	$V_{CE}=5.0\text{V}, I_C=10\text{mA}, f=100\text{MHz}$		210		MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		15		pF

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TO-92 CASE - MECHANICAL OUTLINE



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

R2 (6-August 2014)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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

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).

CONTACT US

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