



THE DATASHEET OF
2N2270



2N2270

NPN SILICON TRANSISTOR



TO-39 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N2270 is a NPN silicon transistor, mounted in a hermetically sealed package, designed for general purpose amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CER}	60	V
Collector-Emitter Voltage	V _{CEO}	45	V
Emitter-Base Voltage	V _{EBO}	7.0	V
Continuous Collector Current	I _C	1.0	A
Power Dissipation	P _D	1.0	W
Power Dissipation (T _C =25°C)	P _D	5.0	W
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 to +200	°C
Thermal Resistance	θ _{JA}	175	°C/W
Thermal Resistance	θ _{JC}	35	°C/W

ELECTRICAL CHARACTERISTICS: (T_C=25°C unless otherwise noted)

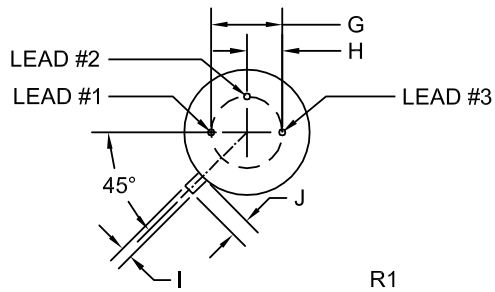
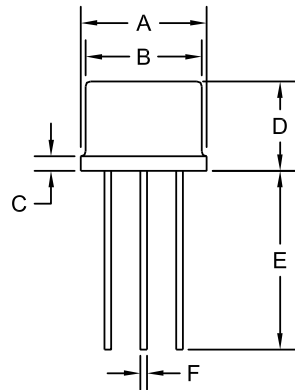
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =60V		50	nA
I _{CBO}	V _{CB} =60V, (T _C =150°C)		50	μA
I _{EBO}	V _{EB} =5.0V		100	nA
BV _{CBO}	I _C =100μA	60		V
BV _{CER}	I _C =100mA, R _{BE} =10Ω	60		V
BV _{CEO}	I _C =100mA	45		V
BV _{EBO}	I _E =100μA	7.0		V
V _{CE(SAT)}	I _C =150mA, I _B =15mA		0.9	V
V _{BE(SAT)}	I _C =150mA, I _B =15mA		1.2	V
h _{FE}	V _{CE} =10V, I _C =1.0mA	30		
h _{FE}	V _{CE} =10V, I _C =150mA	50	200	
h _{fe}	V _{CE} =10V, I _C =5.0mA, f=1.0kHz	50	275	
f _T	V _{CE} =10V, I _C =50mA	100		MHz
C _{ob}	V _{CB} =10V, I _E =0		15	pF
C _{ib}	V _{BE} =0.5V, I _C =0		80	pF
NF	V _{CE} =10V, I _C =0.3mA, f=1.0kHz, R _G =1.0kΩ, BW=1.0Hz		10	dB

R0 (17-August 2012)

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TO-39 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.335	0.370	8.51	9.40
B (DIA)	0.315	0.335	8.00	8.51
C	-	0.040	-	1.02
D	0.240	0.260	6.10	6.60
E	0.500	-	12.70	-
F (DIA)	0.016	0.021	0.41	0.53
G (DIA)	0.200		5.08	
H	0.100		2.54	
I	0.028	0.034	0.71	0.86
J	0.029	0.045	0.74	1.14

TO-39 (REV: R1)

LEAD CODE:

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

MARKING: FULL PART NUMBER

R0 (17-August 2012)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

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

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

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- 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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