

# Central<sup>TM</sup> Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors  
www.centrasemi.com

CM4957

PNP HIGH FREQUENCY  
SILICON TRANSISTOR

TO-72 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR CM4957 is a Silicon PNP RF Transistor, mounted in a hermetically sealed package, designed for high frequency amplifier and non-saturated switching applications. This device is a replacement for the 2N4957.

## MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CB0</sub>	30	V
Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter-Base Voltage	V <sub>EBO</sub>	3.0	V
Collector Current - Continuous	I <sub>C</sub>	30	mA
Power Dissipation	P <sub>D</sub>	200	mW
Power Dissipation (T <sub>C</sub> =25°C)	P <sub>D</sub>	300	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C

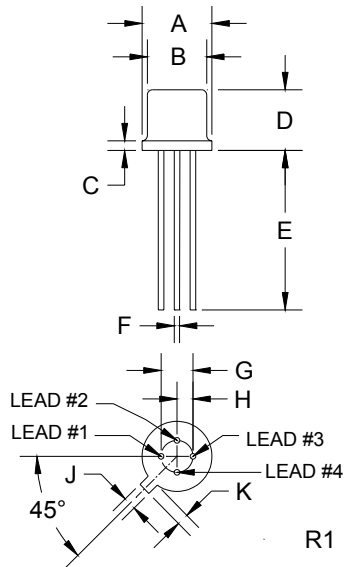
## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =10V			100	nA
BV <sub>CB0</sub>	I <sub>C</sub> =100μA	30			V
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	25			V
BV <sub>EBO</sub>	I <sub>E</sub> =100μA	3.0			V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA	20		150	
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA, f=100MHz	1200		2500	MHz
C <sub>cb</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		1.6	2.0	pF
h <sub>fe</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA, f=1.0kHz	20		200	
G <sub>pe</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =4.0mA, f=450MHz	17		25	dB

(Continued)

R2

TO-72 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.209	0.230	5.31	5.84
B (DIA)	0.175	0.195	4.45	4.95
C	-	0.030	-	0.76
D	0.170	0.210	4.32	5.33
E	0.500	-	12.70	-
F (DIA)	0.016	0.019	0.41	0.48
G (DIA)	0.100		2.54	
H	0.050		1.27	
J	0.036	0.046	0.91	1.17
K	0.028	0.048	0.71	1.22

TO-72 (REV: R1)

Lead Code:

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

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## 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

#### Corporate Headquarters & Customer Support Team

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