

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

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Manufacturers of World Class Discrete Semiconductors  
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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 ( $T_A=25^{\circ}\text{C}$ )

	<u>SYMBOL</u>		<u>UNITS</u>
Collector-Base Voltage	$V_{CB0}$	30	V
Collector-Emitter Voltage	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	3.0	V
Collector Current - Continuous	$I_C$	30	mA
Power Dissipation	$P_D$	200	mW
Power Dissipation ( $T_C=25^{\circ}\text{C}$ )	$P_D$	300	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^{\circ}\text{C}$

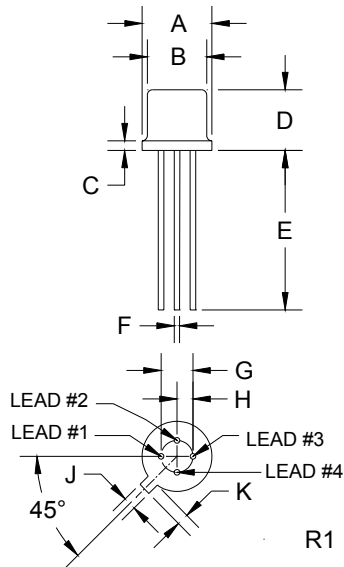
## ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

<u>SYMBOL</u>	<u>TEST CONDITIONS</u>	<u>MIN</u>	<u>TYP</u>	<u>MAX</u>	<u>UNITS</u>
$I_{CBO}$	$V_{CB}=10\text{V}$			100	nA
$BV_{CBO}$	$I_C=100\mu\text{A}$	30			V
$BV_{CEO}$	$I_C=1.0\text{mA}$	25			V
$BV_{EBO}$	$I_E=100\mu\text{A}$	3.0			V
$h_{FE}$	$V_{CE}=10\text{V}, I_C=2.0\text{mA}$	20		150	
$f_T$	$V_{CE}=10\text{V}, I_C=2.0\text{mA}, f=100\text{MHz}$	1200		2500	MHz
$C_{cb}$	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		1.6	2.0	pF
$h_{fe}$	$V_{CE}=10\text{V}, I_C=2.0\text{mA}, f=1.0\text{kHz}$	20		200	
$G_{pe}$	$V_{CE}=10\text{V}, I_C=4.0\text{mA}, f=450\text{MHz}$	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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