

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

CM4957

PNP HIGH FREQUENCY
SILICON TRANSISTOR

JEDEC 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.

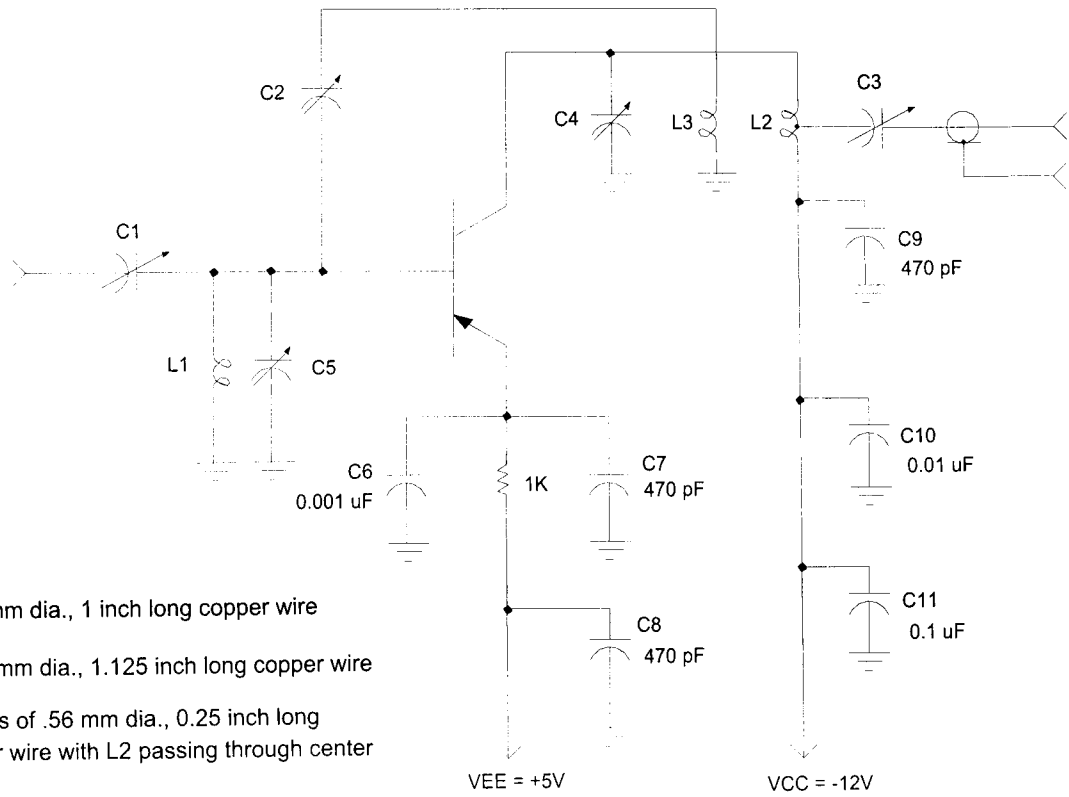
MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	<u>SYMBOL</u>		<u>UNITS</u>
Collector-Base Voltage	V_{CB0}	30	V
Collector-Emitter Voltage	V_{CEO}	30	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}	$I_C=1.0\text{mA}$	30			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} (Figure 1)	$V_{CE}=10\text{V}, I_C=4.0\text{mA}, f=450\text{MHz}$	17		25	dB

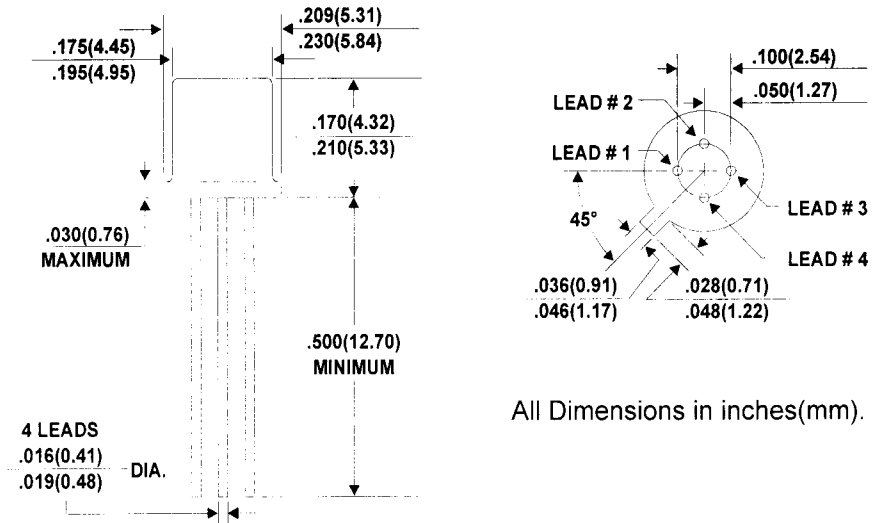
(See Reverse Side)



- L1 = .56 mm dia., 1 inch long copper wire
- L2 = 1.25 mm dia., 1.125 inch long copper wire
- L3 = 2 turns of .56 mm dia., 0.25 inch long copper wire with L2 passing through center
- C1 through C5 = 0 - 10 pF variable capacitor

Figure 1. Power Gain Test Circuit

JEDEC TO-72 CASE - MECHANICAL OUTLINE



All Dimensions in inches(mm).

- Lead Code:
- 1) Emitter
 - 2) Base
 - 3) Collector
 - 4) Case