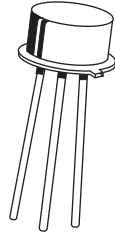


CM5160

PNP HIGH FREQUENCY  
SILICON TRANSISTOR



JEDEC TO-39 CASE

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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CM5160 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 2N5160.

**MARKING CODE: FULL PART NUMBER**

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

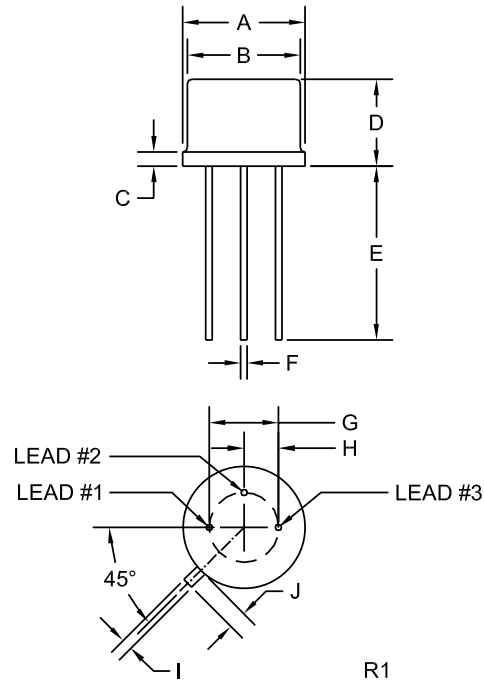
	SYMBOL		UNITS
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	4.0	V
Collector Current - Continuous	$I_C$	400	mA
Power Dissipation	$P_D$	1.0	W
Power Dissipation ( $T_C=25^\circ\text{C}$ )	$P_D$	5.0	W
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +200	$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$I_{CBO}$	$V_{CB}=28\text{V}$			1.0	$\mu\text{A}$
$I_{CES}$	$V_{CE}=60\text{V}$			100	$\mu\text{A}$
$I_{CEO}$	$V_{CE}=28\text{V}$			20	$\mu\text{A}$
$BV_{CEO}$	$I_C=5.0\text{mA}$	40			V
$BV_{EBO}$	$I_E=100\mu\text{A}$	4.0			V
$h_{FE}$	$V_{CE}=5.0\text{V}, I_C=50\text{mA}$	10			
$f_T$	$V_{CE}=15\text{V}, I_C=50\text{mA}, f=200\text{MHz}$	500			MHz
$C_{cb}$	$V_{CB}=28\text{V}, I_E=0, f=0.1$ to $1.0\text{MHz}$			4.0	pF

R1 (18-November 2005)

JEDEC TO-39 CASE - MECHANICAL OUTLINE



**LEAD CODE:**

- 1) EMITTER
- 2) BASE
- 3) COLLECTOR

**MARKING CODE:**

**FULL PART NUMBER**

SYMBOL	DIMENSIONS			
	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)

R1 (18-November 2005)