#### SILICON PNP RF TRANSISTOR



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#### **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: FULL PART NUMBER** 



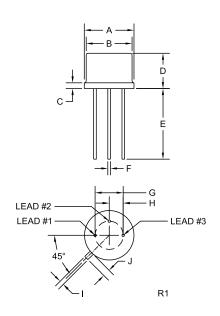
MAXIMUM RATINGS: (T<sub>A</sub>=25°C unless otherwise noted) SYMBOL UNITS Collector-Base Voltage 60  $V_{CBO}$ V Collector-Emitter Voltage 40 V **VCEO** Emitter-Base Voltage  $V_{\mathsf{EBO}}$ 4.0 Continuous Collector Current  $I_{C}$ 0.4 Α Power Dissipation  $P_{\mathsf{D}}$ 1.0 W Power Dissipation (T<sub>C</sub>=25°C)  $P_{\mathsf{D}}$ 5.0 W Operating and Storage Junction Temperature -65 to +200 °C T<sub>J</sub>, T<sub>stg</sub> Thermal Resistance 175 °C/W  $\Theta_{\mathsf{JA}}$ Thermal Resistance 35 °C/W  $\Theta$ JC

ELECTRICAL	L CHARACTERISTICS: (TA=25°C ur	nless otherwise ne	oted)	
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =28V		1.0	μA
ICES	V <sub>CE</sub> =60V		100	μΑ
ICEO	V <sub>CE</sub> =28V		20	μΑ
BV <sub>CEO</sub>	I <sub>C</sub> =5.0mA	40		V
BVEBO	I <sub>E</sub> =100μA	4.0		V
hFE	V <sub>CE</sub> =5.0V, I <sub>C</sub> =50mA	10		
$f_{T}$	$V_{CE}$ =15V, $I_{C}$ =50mA, f=200MHz	500		MHz
$C_{cb}$	$V_{CB}$ =28V, $I_E$ =0, f=0.1 to 1.0MHz		4.0	pF

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#### **TO-39 CASE - MECHANICAL OUTLINE**



DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
A (DIA)	0.335	0.370	8.51	9.40			
B (DIA)	0.315	0.335	8.00	8.51			
С	-	0.040	-	1.02			
D	0.240	0.260	6.10	6.60			
Е	0.500	-	12.70				
F (DIA)	0.016	0.021	0.41	0.53			
G (DIA)	0.200		5.08				
Н	0.100		2.54				
	0.028	0.034	0.71	0.86			
J	0.029	0.045	0.74	1.14			
TO 20 (DEV): D1)							

TO-39 (REV: R1)

## LEAD CODE:

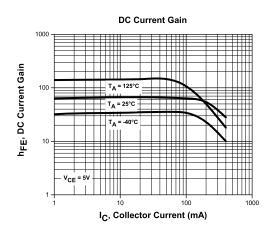
- 1) Emitter 2) Base
- 3) Collector

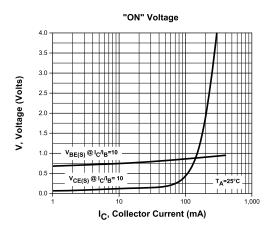
MARKING: FULL PART NUMBER

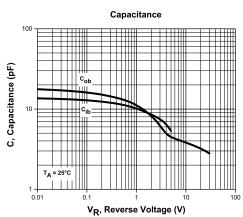


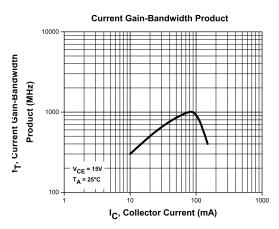


## TYPICAL ELECTRICAL CHARACTERISTICS







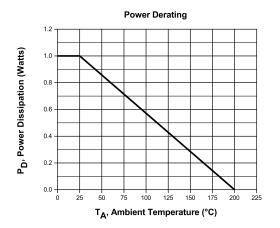


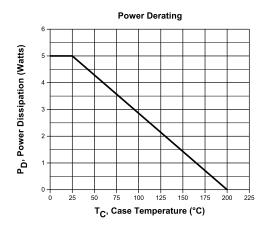
R2 (25-July 2016)





# TYPICAL ELECTRICAL CHARACTERISTICS





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- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

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- 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

#### **CONTACT US**

## Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA Main Tel: (631) 435-1110

Main Fax: (631) 435-1824 Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: <a href="https://www.centralsemi.com/wwreps">www.centralsemi.com/wwreps</a>

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