# SILICON PNP RF TRANSISTOR

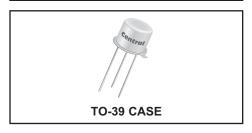


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# **DESCRIPTION:**

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



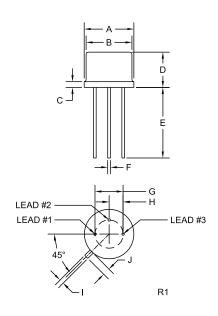
MAXIMUM RATINGS: (TA=25°C unless otherwis	e noted)		
	SYMBOL		UNITS
Collector-Base Voltage	$V_{CBO}$	60	V
Collector-Emitter Voltage	$V_{CEO}$	40	V
Emitter-Base Voltage	$V_{EBO}$	4.0	V
Continuous Collector Current	IC	0.4	Α
Power Dissipation	$P_{D}$	1.0	W
Power Dissipation (T <sub>C</sub> =25°C)	$P_{D}$	5.0	W
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200	°C
Thermal Resistance	$\Theta_{\sf JA}$	175	°C/W
Thermal Resistance	$\Theta$ JC	35	°C/W
ELECTRICAL CHARACTERISTICS: (TA=25°C u	ınless otherwise no	oted)	
SYMBOL TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub> V <sub>CB</sub> =28V		1.0	μΑ

SYMBOL ICBO	TEST CONDITIONS V <sub>CB</sub> =28V	MIN	<b>MAX</b> 1.0	<b>UNITS</b> μΑ
	V <sub>CF</sub> =60V		100	μA
I <sub>CES</sub>	~=		20	•
ICEO	V <sub>CE</sub> =28V	40	20	μA
BVCEO	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		
fT	V <sub>CE</sub> =15V, I <sub>C</sub> =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-39 (REV: R1)

## LEAD CODE:

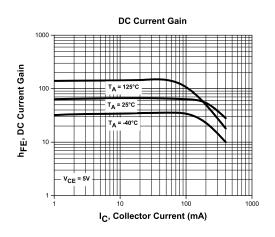
- 1) Emitter 2) Base
- 3) Collector

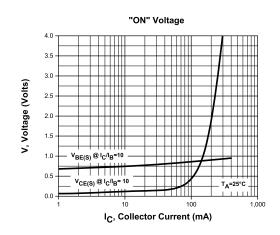
MARKING: FULL PART NUMBER

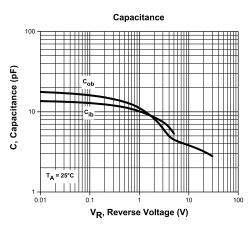
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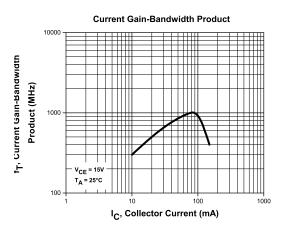


## TYPICAL ELECTRICAL CHARACTERISTICS





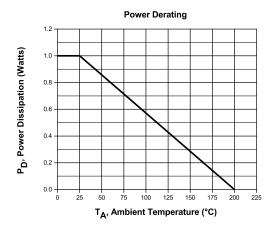


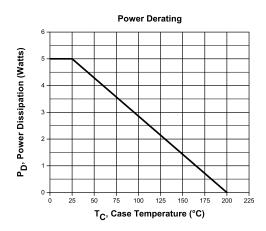


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## TYPICAL ELECTRICAL CHARACTERISTICS





## **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**



#### 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

#### **DESIGNER SUPPORT/SERVICES**

Central's applications engineering team is ready to discuss your design challenges. Just ask.

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- 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

#### **CONTACT US**

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