# 2N5356

# SILICON PNP TRANSISTOR

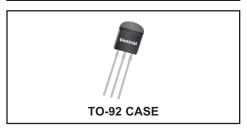


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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR 2N5356 is a silicon PNP transistor, manufactured by the epitaxial planar process, designed for general purpose amplifier and switching applications.





MAXIMUM RATINGS: (T <sub>A</sub> =25°C)	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CBO</sub>	25	V
Collector-Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter-Base Voltage	$V_{EBO}$	4.0	V
Continuous Collector Current	IC	350	mA
Peak Collector Current	I <sub>CM</sub>	700	mA
Power Dissipation	$P_{D}$	360	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C

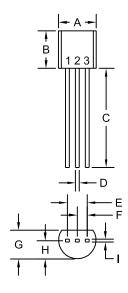
a Storage Junction Temperature	¹J, ¹stg	-03 (0	7 100	C
CHARACTERISTICS: (T <sub>A</sub> =25°C u	nless otherwise	noted)		
TEST CONDITIONS	MIN	TYP	MAX	UNITS
				nA
V <sub>CB</sub> =25V (T <sub>A</sub> =100°C)			10	μΑ
V <sub>CE</sub> =25V			100	nA
V <sub>EB</sub> =4.0V			10	μΑ
I <sub>C</sub> =10mA	25			V
I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA			250	mV
I <sub>C</sub> =300mA, I <sub>B</sub> =30mA			1.0	V
I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA			1.1	V
I <sub>C</sub> =300mA, I <sub>B</sub> =30mA			2.0	V
V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA	500		800	mV
V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA	200			
V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA	250		500	
V <sub>CE</sub> =5.0V, I <sub>C</sub> =300mA	75			
$V_{CE}$ =10V, $I_{C}$ =2.0mA, f=1.0kHz	200		750	
V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA		250		MHz
$V_{CB}$ =10V, $I_E$ =0, f=1.0MHz			8.0	pF
$V_{EB}$ =0.5V, $I_{C}$ =0, f=1.0MHz			35	pF
	CHARACTERISTICS: (T <sub>A</sub> =25°C utest conditions) V <sub>CB</sub> =25V V <sub>CB</sub> =25V (T <sub>A</sub> =100°C) V <sub>CE</sub> =25V V <sub>EB</sub> =4.0V I <sub>C</sub> =10mA I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA I <sub>C</sub> =300mA, I <sub>B</sub> =30mA I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA I <sub>C</sub> =300mA, I <sub>B</sub> =2.5mA I <sub>C</sub> =300mA, I <sub>C</sub> =2.0mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA, f=1.0kHz V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA	CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise TEST CONDITIONS V <sub>CB</sub> =25V V <sub>CB</sub> =25V (T <sub>A</sub> =100°C) V <sub>CE</sub> =25V V <sub>EB</sub> =4.0V I <sub>C</sub> =10mA 25 I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA I <sub>C</sub> =300mA, I <sub>B</sub> =30mA I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA I <sub>C</sub> =300mA, I <sub>B</sub> =30mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 500 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 200 V <sub>CE</sub> =10V, I <sub>C</sub> =50mA 250 V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA V <sub>CE</sub> =	CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise noted) TEST CONDITIONS  V <sub>CB</sub> =25V  V <sub>CB</sub> =25V  V <sub>CB</sub> =25V  V <sub>EB</sub> =4.0V  I <sub>C</sub> =10mA  I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA  I <sub>C</sub> =300mA, I <sub>B</sub> =30mA  I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA  I <sub>C</sub> =300mA, I <sub>B</sub> =2.5mA  I <sub>C</sub> =300mA, I <sub>C</sub> =2.0mA  I <sub>C</sub> =10V, I <sub>C</sub> =2.0mA  V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA  V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA  V <sub>CE</sub> =1.0V, I <sub>C</sub> =50mA  V <sub>CE</sub> =5.0V, I <sub>C</sub> =300mA  V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA  V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA	CHARACTERISTICS: (T <sub>A</sub> =25°C unless otherwise noted) TEST CONDITIONS MIN TYP MAX V <sub>CB</sub> =25V 100 V <sub>CB</sub> =25V (T <sub>A</sub> =100°C) 10 V <sub>CE</sub> =25V 100 V <sub>CB</sub> =4.0V 10 I <sub>C</sub> =10mA 25 I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA 250 I <sub>C</sub> =300mA, I <sub>B</sub> =30mA 1.0 I <sub>C</sub> =50mA, I <sub>B</sub> =2.5mA 1.1 I <sub>C</sub> =300mA, I <sub>B</sub> =30mA 2.0 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 500 800 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 200 V <sub>CE</sub> =10V, I <sub>C</sub> =50mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 200 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 75 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 750 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 250 V <sub>CE</sub> =10V, I <sub>C</sub> =2.0mA 350 V <sub>CE</sub> =10V, I <sub>C</sub> =

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# **TO-92 CASE - MECHANICAL OUTLINE**



DIMENSIONS						
	INCHES		MILLIMETERS			
SYMBOL	MIN	MAX	MIN	MAX		
A (DIA)	0.175	0.205	4.45	5.21		
В	0.170	0.210	4.32	5.33		
С	0.500	-	12.70	-		
D	0.016	0.022	0.41	0.56		
E	0.100		2.54			
F	0.050		1.27			
G	0.125	0.165	3.18	4.19		
Н	0.080	0.105	2.03	2.67		
	0.015		0.38			

TO-92 (REV: R1)

# LEAD CODE:

- 1) Emitter 2) Collector 3) Base

R1

## MARKING:

**FULL PART NUMBER** 

## **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.

- Free guick ship samples (2<sup>nd</sup> day air)
- 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

## REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

## **CONTACT US**

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