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Manufacturers of World Class Discrete Semiconductors

2N4406 2N4407

**PNP SILICON TRANSISTOR** 

**JEDEC TO-39 CASE** 

## **DESCRIPTION**

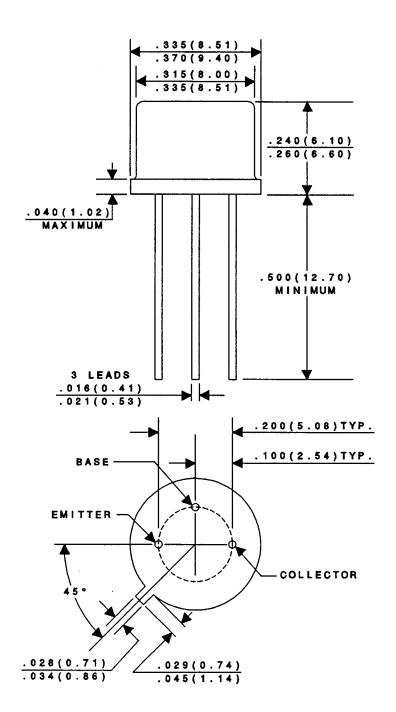
The CENTRAL SEMICONDUCTOR 2N4406, 2N4407 types are PNP Silicon Epitaxial Planar Transistors designed for general purpose and switching applications.

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

	SYMBOL		<u>UNITS</u>
Collector-Base Voltage Collector-Emitter Voltage Emitter-Base Voltage Collector Current Power Dissipation Power Dissipation (T <sub>C</sub> = 25°C)	VCBO VCEO VEBO IC PD PD	80 80 5.0 2.0 1.25 8.75	V V V A W
Operating and Storage Junction Temperature Thermal Resistance Thermal Resistance	T <sub>J</sub> ,T <sub>stg</sub> Θ <sub>JA</sub> Θ <sub>JC</sub>	-65 to +200 140 20	°C/W °C/W

# ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25 °C unless otherwise noted)

		<u>2N</u> 4	<u>2N4406</u>		<u>2N4407</u>	
SYMBOL	TEST CONDITIONS	MIN	MAX	<u>MIN</u>	MAX	<u>UNITS</u>
<sup>I</sup> СВО	V <sub>CB</sub> =60V		25		25	μА
I <sub>EBO</sub>	V <sub>EB</sub> =3.0V		25		25	μА
BVCEO	$I_C = 10 \text{mA}$	80		80		·V
BV <sub>CBO</sub>	$I_C = 10\mu A$	80		80		V
BVEBO	$I_E = 10\mu A$	5.0		5.0		V
V <sub>CE(SAT)</sub>	$I_{C} = 150 \text{mA}, I_{B} = 15 \text{mA}$		0.2		0.2	V
VCE(SAT)	$I_{C} = 500 \text{mA}, I_{B} = 50 \text{mA}$		0.4		0.4	V
VCE(SAT)	$I_C = 1.0A$ , $I_B = 100mA$		0.7		0.7	V
VCE(SAT)	$I_C = 1.5A$ , $I_B = 150mA$	,	1.5		1.5	V
VBE(SAT)	$I_{C} = 150 \text{mA}, I_{B} = 15 \text{mA}$		0.9		0.9	V
VBE(SAT)	$I_C = 1.0A$ , $I_B = 100mA$		1.3		1.3	V
VBE(SAT)	$I_C = 1.5A$ , $I_B = 150mA$		1.5		1.5	V
V <sub>BE</sub> (ON)	$V_{CE} = 1.0V, I_{C} = 500 \text{mA}$		1.0		1.0	V
hFE	$V_{CE} = 5.0V, I_{C} = 10mA$	30		80		
hFE	$V_{CE} = 5.0V, I_{C} = 150mA$	30		80		
hFE	$V_{CE} = 5.0V, I_{C} = 500 \text{mA}$	30	120	80	240	
hFE	$V_{CE} = 5.0V, I_{C} = 1.0A$	20		30		
hFE	$V_{CE} = 5.0V, I_{C} = 1.5A$	10		10		
fŢ	$V_{CE} = 20V$ , $I_{C} = 50mA$ , $f = 100MHz$	50		50		MHz
C <sub>cb</sub>	$V_{CB} = 10V$ , $I_{E} = 0$ , $f = 1.0MHz$		50		50	pF



All Dimensions in Inches (mm).





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- Special wafer diffusions
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#### 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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