

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

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Manufacturers of World Class Discrete Semiconductors

2N6424  
2N6425

PNP SILICON  
POWER TRANSISTOR

JEDEC TO-66 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6424 and 2N6225 types are PNP Silicon Power Transistors designed for high speed switching and high voltage amplifier applications.

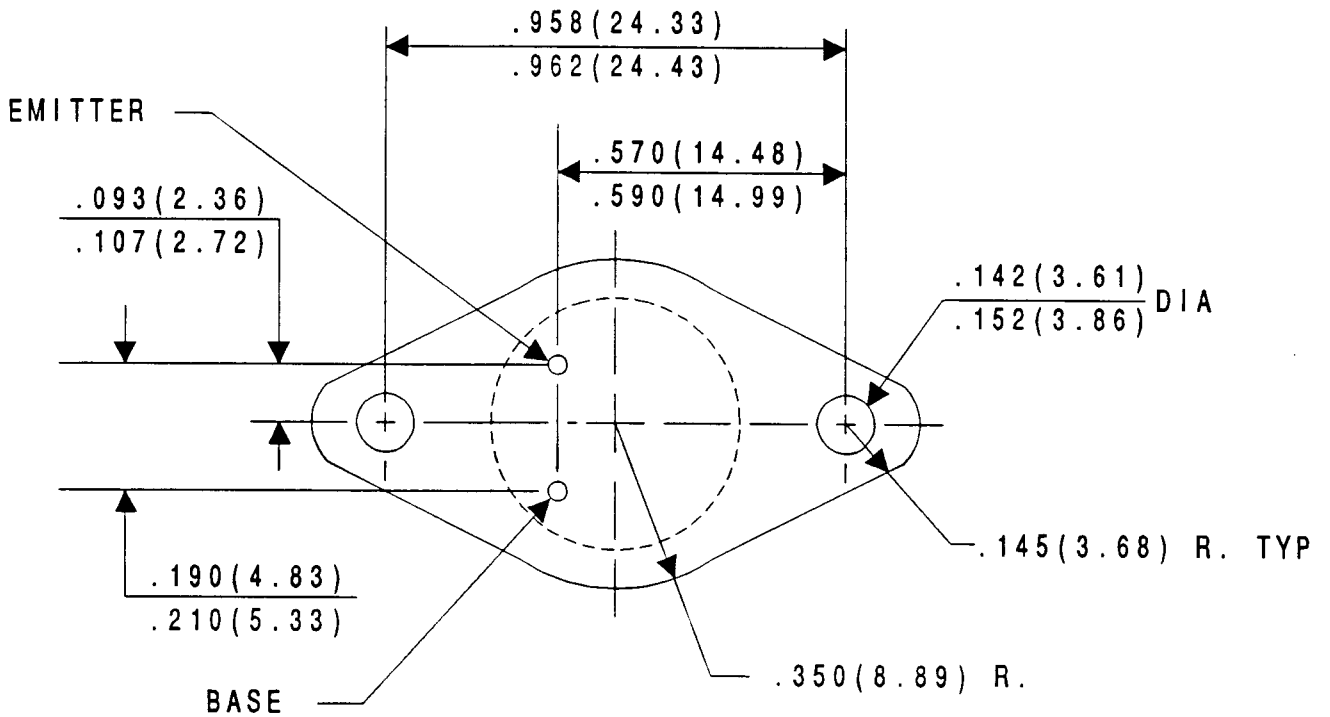
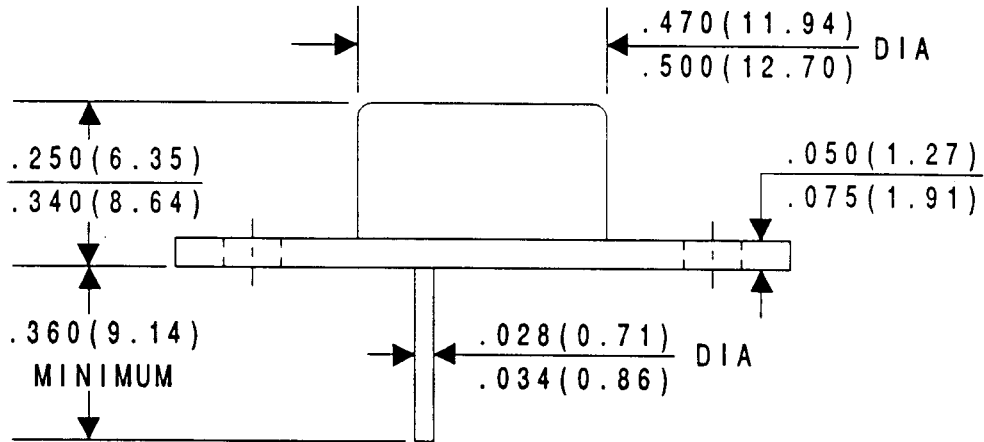
## MAXIMUM RATINGS (T<sub>C</sub> = 25°C)

	SYMBOL	2N6424	2N6425	UNITS
Collector-Base Voltage	V <sub>CBO</sub>	250	325	V
Collector-Emitter Voltage	V <sub>CEO</sub>	225	300	V
Emitter-Base Voltage	V <sub>EBO</sub>	6.0	6.0	V
Collector Current	I <sub>C</sub>	1.0	1.0	A
Peak Collector Current	I <sub>CM</sub>	2.0	2.0	A
Base Current	I <sub>B</sub>	0.5	0.5	A
Peak Base Current	I <sub>BM</sub>	1.0	1.0	A
Power Dissipation	P <sub>D</sub>	20	20	W
Operating and Storage				
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +200		°C
Thermal Resistance	θ <sub>JC</sub>	8.75	8.75	°C/W

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

SYMBOL	TEST CONDITIONS	2N6424		2N6425		UNITS
		MIN	MAX	MIN	MAX	
I <sub>CEV</sub>	V <sub>CE</sub> = 250V, V <sub>BE(off)</sub> = 1.5V		0.5			mA
I <sub>CEV</sub>	V <sub>CE</sub> = 300V, V <sub>BE(off)</sub> = 1.5V			0.5		mA
I <sub>CEV</sub>	V <sub>CE</sub> = 125V, V <sub>BE(off)</sub> = 1.5V, T <sub>C</sub> = 100°C		1.0			mA
I <sub>CEV</sub>	V <sub>CE</sub> = 200V, V <sub>BE(off)</sub> = 1.5V, T <sub>C</sub> = 100°C			1.0		mA
I <sub>CBO</sub>	V <sub>CE</sub> = 250V		0.1			mA
I <sub>CBO</sub>	V <sub>CE</sub> = 325V			0.1		mA
I <sub>CEO</sub>	V <sub>CE</sub> = 125V		0.25			mA
I <sub>CEO</sub>	V <sub>CE</sub> = 200V			0.25		mA
I <sub>EBO</sub>	V <sub>EB</sub> = 6.0V		0.1		0.1	mA
BV <sub>CEO</sub>	I <sub>C</sub> = 5.0mA	225		300		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> = 250mA, I <sub>B</sub> = 25mA		2.5		2.5	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 100mA		1.0		1.0	V
h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 50mA	30		30		
h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 100mA	40	200	40	200	
h <sub>FE</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 250mA	25		25		
f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 100mA, f = 10MHz	10		10		MHz
C <sub>ob</sub>	V <sub>CB</sub> = 10V, I <sub>E</sub> = 0, f = 1.0MHz		120		120	pF
h <sub>fe</sub>	V <sub>CE</sub> = 20V, I <sub>C</sub> = 100mA, f = 1.0kHz	35		35		

# TO-66 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).