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Manufacturers of World Class Discrete Semiconductors

Data Sheet

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 hign speed switching and high voltage amplifier applications.

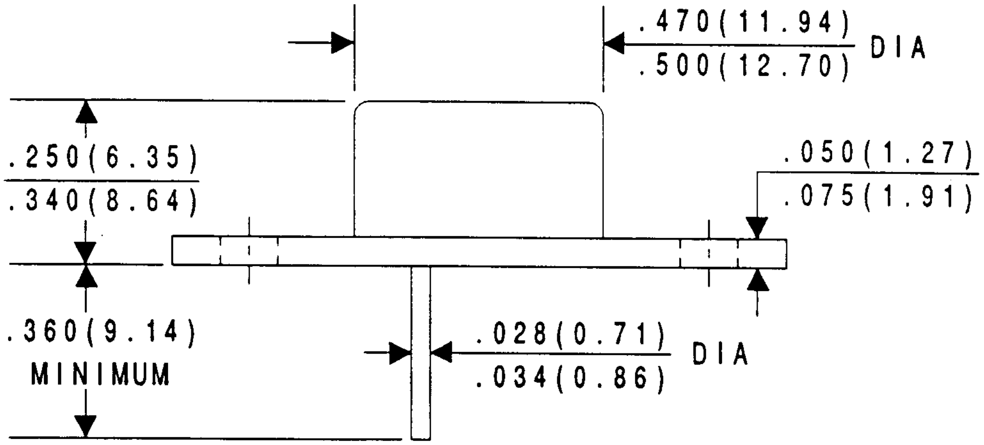
MAXIMUM RATINGS ($T_C=25°C$)

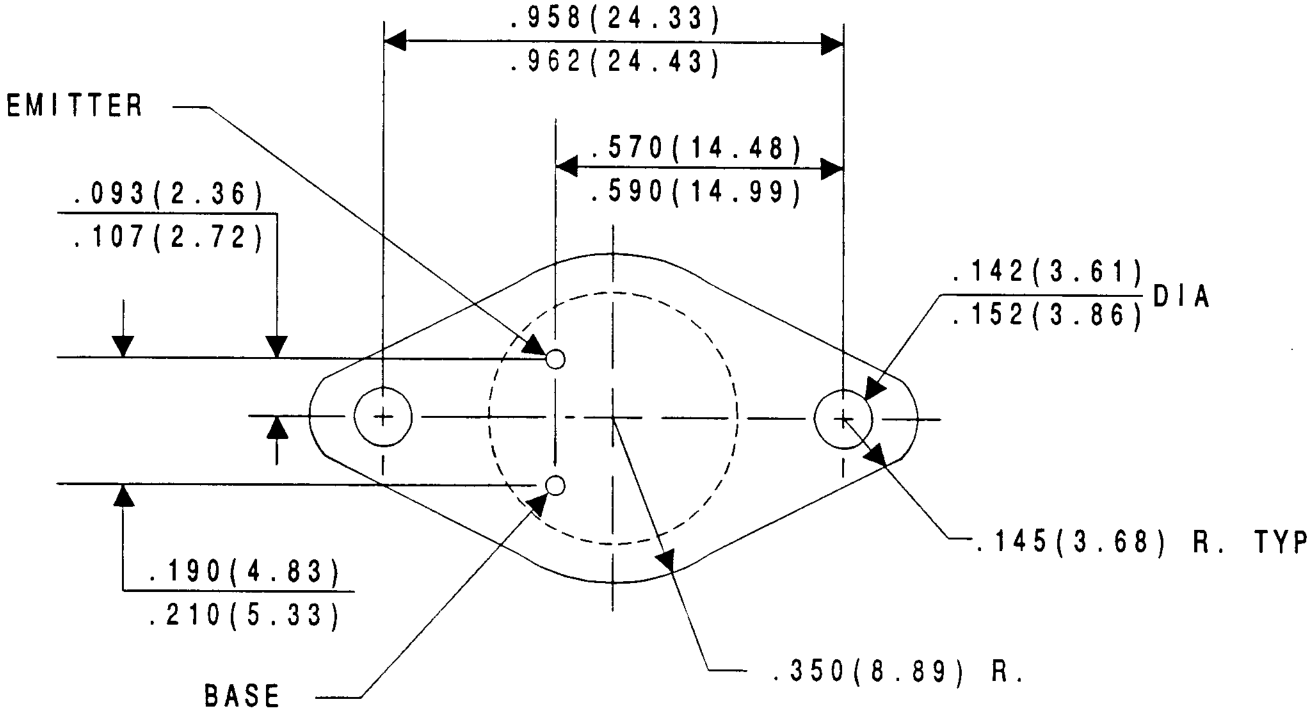
	SYMBOL	2N6424	2N6425	UNITS
Collector-Base Voltage	V_{CBO}	250	325	V
Collector-Emitter Voltage	V_{CEO}	225	300	V
Emitter-Base Voltage	V_{EBO}	6.0	6.0	V
Collector Current	I_C	1.0	1.0	A
Peak Collector Current	I_{CM}	2.0	2.0	A
Base Current	I_B	0.5	0.5	A
Peak Base Current	I_{BM}	1.0	1.0	A
Power Dissipation	P_D	20	20	W
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +200		°C
Thermal Resistance	Θ_{JC}	8.75	8.75	°C/W

ELECTRICAL CHARACTERISTICS ($T_C=25°C$ unless otherwise noted)

		2N6424		2N6425		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNITS
I_{CEV}	$V_{CE}=250V$, $V_{BE(off)}=1.5V$		0.5			mA
I_{CEV}	$V_{CE}=300V$, $V_{BE(off)}=1.5V$				0.5	mA
I_{CEV}	$V_{CE}=125V$, $V_{BE(off)}=1.5V$, $T_C=100°C$		1.0			mA
I_{CEV}	$V_{CE}=200V$, $V_{BE(off)}=1.5V$, $T_C=100°C$				1.0	mA
I_{CBO}	$V_{CE}=250V$		0.1			mA
I_{CBO}	$V_{CE}=325V$				0.1	mA
I_{CEO}	$V_{CE}=125V$		0.25			mA
I_{CEO}	$V_{CE}=200V$				0.25	mA
I_{EBO}	$V_{EB}=6.0V$		0.1		0.1	mA
BV_{CEO}	$I_C=5.0mA$	225		300		V
$V_{CE(SAT)}$	$I_C=250mA$, $I_B=25mA$		2.5		2.5	V
$V_{BE(ON)}$	$V_{CE}=10V$, $I_C=100mA$		1.0		1.0	V
h_{FE}	$V_{CE}=10V$, $I_C=50mA$	30		30		
h_{FE}	$V_{CE}=10V$, $I_C=100mA$	40	200	40	200	
h_{FE}	$V_{CE}=10V$, $I_C=250mA$	25		25		
f_T	$V_{CE}=10V$, $I_C=100mA$, $f=10MHz$	10		10		MHz
C_{ob}	$V_{CB}=10V$, $I_E=0$, $f=1.0MHz$		120		120	pF
h_{fe}	$V_{CE}=20V$, $I_C=100mA$, $f=1.0kHz$	35		35		

TO-66 CASE - MECHANICAL OUTLINE





All Dimensions in Inches (mm).

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