

CentralTM Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N3902

NPN HIGH VOLTAGE
POWER TRANSISTOR

JEDEC TO-3 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3902 type is a NPN Power Transistors, mounted in a hermetically sealed metal case, designed for high voltage amplifier and switching applications.

MAXIMUM RATINGS (T_C=25°C)

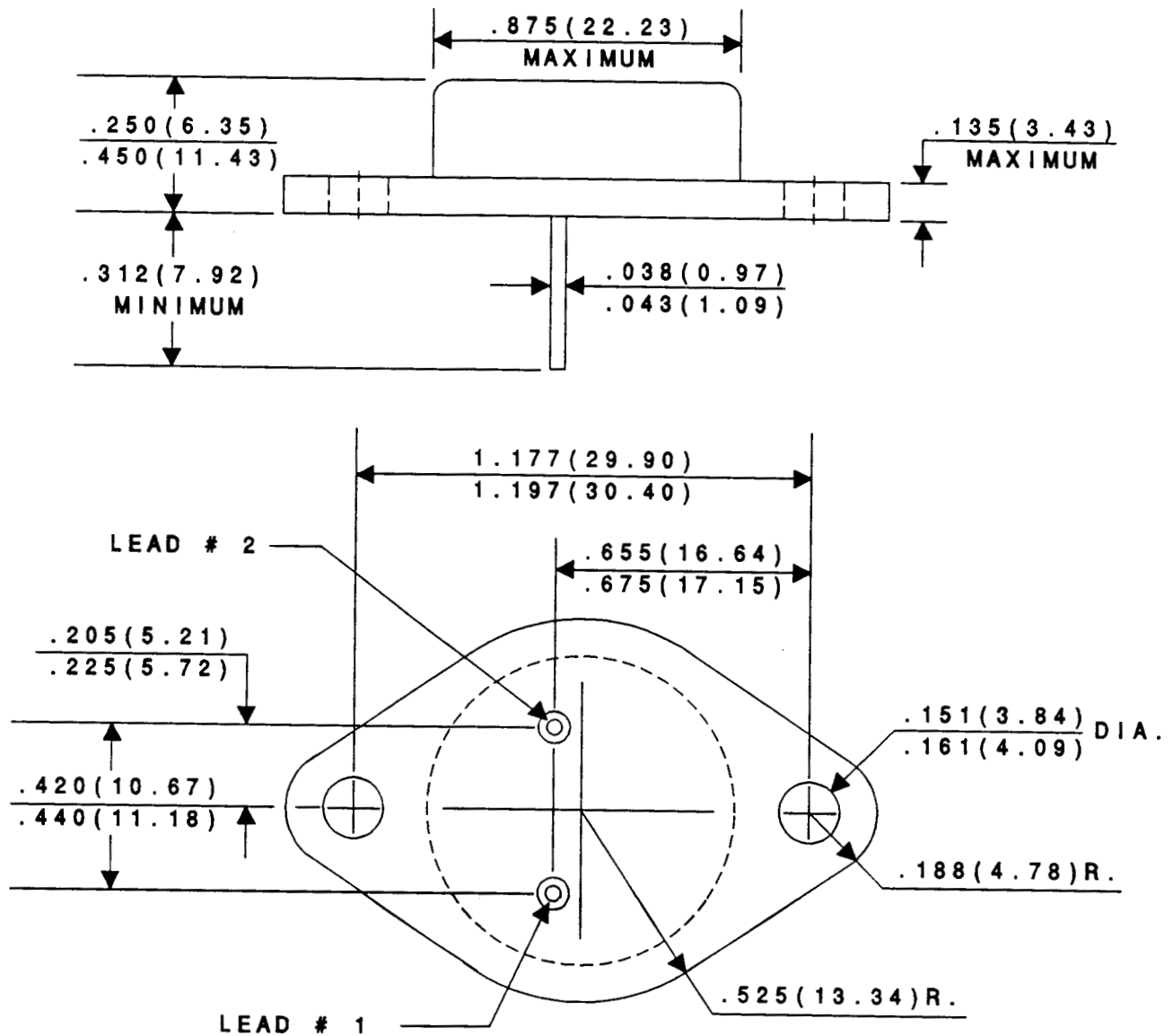
	SYMBOL		UNITS
Collector-Emitter Voltage	V _{CEX}	700	V
Collector-Emitter Voltage	V _{CEO}	400	V
Emitter-Base Voltage	V _{EBO}	5.0	V
Collector Current	I _C	3.5	A
Base Current	I _B	2.0	A
Power Dissipation (T _C =75°C)	P _D	100	W
Operating Junction Temperature	T _J	-65 to +150	°C
Storage Temperature	T _{stg}	-65 to +200	°C
Thermal Resistance	θ _{JC}	0.75	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CEV}	V _{CE} =700V, V _{EB(off)} =1.5V		2.5	mA
I _{CEV}	V _{CE} =400V, V _{EB(off)} =1.5V, T _C =125°C		0.5	mA
I _{CEO}	V _{CE} =400V		0.25	mA
I _{EBO}	V _{EB} =5.0V		5.0	mA
BV _{CEO}	I _C =100mA	325		V
V _{CE(SAT)}	I _C =1.0A, I _B =100mA		0.8	V
V _{CE(SAT)}	I _C =2.5A, I _B =500mA		2.5	V
V _{BE(SAT)}	I _C =1.0A, I _B =100mA		1.5	V
V _{BE(SAT)}	I _C =2.5A, I _B =500mA		2.0	V
h _{FE}	V _{CE} =5.0V, I _C =1.0A	30	90	
h _{FE}	V _{CE} =5.0V, I _C =2.5A	10		
f _T	V _{CE} =10V, I _C =200mA	2.8		MHz

(SEE REVERSE SIDE)

JEDEC TO-3 CASE - MECHANICAL OUTLINE



All Dimensions in Inches (mm).

LEAD CODE:

1) BASE

2) EMITTER

CASE) COLLECTOR