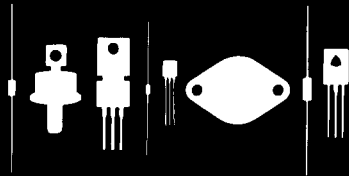


Central Semiconductor Corp.  
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 145 Adams Avenue  
 Hauppauge, New York 11788



2N404A

GERMANIUM TRANSISTOR

JEDEC TO - 5 CASE

( all leads insulated from case )

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N404A is a Germanium PNP Transistor designed for low frequency medium power amplifier and switching applications.

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

Collector-Base Voltage	$V_{CBO}$	40 volts
Collector-Emitter Voltage ( Punch - through)	$V_{pt}$	35 volts
Emitter-Base Voltage	$V_{EBO}$	25 volts
Collector Current	$I_C$	150 m Amps
Emitter Current	$I_E$	150 m Amps
Power Dissipation	$P_T$	150 m Watts
Operating Junction Temperature	$T_j$	-65 to $100^{\circ}C$
Storage Temperature	$T_{stg}$	-65 to $100^{\circ}C$

ELECTRICAL CHARACTERISTICS (  $T_A = 25^{\circ}C$  unless otherwise noted )

<u>Symbol</u>	<u>Test Conditions</u>	<u>Min.</u>	<u>Max.</u>	<u>Unit</u>
$I_{CBO}$	$V_{CB} = 12 V$		5	$\mu A$
$I_{CBO}$	$V_{CB} = 12V, T_A = 80^{\circ} C$		90	$\mu A$
$I_{EBO}$	$V_{EB} = 2.5V$		2.5	$\mu A$
$V_{CBO}$	$I_C = 20 \mu A$	40		V
$V_{EBO}$	$I_E = 20 \mu A$	25		V
$V_{CE} (s)$	$I_C = 12 mA, I_B = 0.4 mA$		0.15	V
$V_{CE} (s)$	$I_C = 24 mA, I_B = 1.0 mA$		0.20	V
$V_{BE} (s)$	$I_C = 12 mA, I_B = 0.4 mA$		0.35	V
$V_{BE} (s)$	$I_C = 24 mA, I_B = 1.0 mA$		0.40	v
$h_{FE}$	$V_{CE} = 0.15V, I_C = 12 mA$	30		-
$h_{FE}$	$V_{CE} = 0.20V, I_C = 24 mA$	24		-
$V_{EBfL}$	$V_{CB} = 35V$		1.0	V
$h_{fe}$	$V_{CE} = 6V, I_C = 1 mA, f = 1 KHz$	135 typ.		-
$h_{ie}$	$V_{CE} = 6V, I_C = 1 mA, f = 1 KHz$	4 typ.		Kohm
$h_{oe}$	$V_{CE} = 6V, I_C = 1 mA, f = 1 KHz$	50 typ.		umhD
$h_{re}$	$V_{CE} = 6V, I_C = 1 mA, f = 1 KHz$	$7 \times 10^{-4}$ typ.		-
$c_{ob}$	$V_{CB} = 6V, f = 2 mHZ$		20	Pf
$f_{hfb}$	$V_{CB} = 6V, I_E = 1 mA$	4		mHZ