Central™
Semiconductor Corp.
145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

2N5232A

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5232A type is a NPN Silicon Planar Epitaxial Transistors designed for low noise amplifier applications.

MAXIMUM RATINGS ($T_A = 25^oC$)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Continuous Collector Current	I_C	100	mA
Power Dissipation	P_D	625	mW
Operating and Storage Junction Temperature	T_J, T_{stg}	-65 to +150	^oC
Thermal Resistance	Θ_{JA}	0.2	$^oC/mW$

ELECTRICAL CHARACTERISTICS ($T_A = 25^oC$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB} = 50V$			30	nA
I_{CBO}	$V_{CB} = 50V$, $T_A = 100^oC$			10	μA
I_{CES}	$V_{CB} = 50V$			30	nA
I_{EBO}	$V_{EB} = 5.0V$			50	nA
BV_{CBO}	$I_C = 10\mu A$	70			V
BV_{CEO}	$I_C = 10mA$	50			V
BV_{EBO}	$I_C = 10\mu A$	5.0			V
$V_{CE(SAT)}$	$I_C = 10mA$, $I_B = 1.0mA$			0.125	V
$V_{BE(SAT)}$	$I_C = 10mA$, $I_B = 1.0mA$			0.780	V
$V_{BE(ON)}$	$V_{CE} = 10V$, $I_C = 2.0mA$	0.500		0.900	V
h_{FE}	$V_{CE} = 5.0V$, $I_C = 2.0mA$	250		500	
h_{fe}	$V_{CE} = 5.0V$, $I_C = 2.0mA$, $f = 1.0kHz$	250		750	
C_{ob}	$V_{CB} = 10V$, $I_E = 0$, $f = 1.0MHz$			4.0	pF
NF	$V_{CE} = 5.0V$, $I_C = 100\mu A$, $R_g = 5k\Omega$ $f = 1kHz$, $BW = 15.7kHz$		1.9	5.0	dB