Central
Semiconductor Corp.
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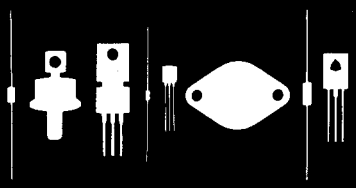
Hauppauge, New York 11788



2N5249,A TO-92 (ECB)
PN5249,A TO-92 (EBC)

NPN SILICON TRANSISTORS

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5249 series types are NPN silicon transistors manufactured by the epitaxial planar process designed for high gain amplifier applications.

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CBO}	70	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	100	mA
Power Dissipation	P_D	625	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150	°C

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	V_{CB}=50V		30	nA
I_{CBO}	V_{CB}=50V, T_A=100°C		10	µA
I_{CES}	V_{CB}=50V		30	nA
I_{EBO}	V_{EB}=5.0V		50	nA
BV_{CBO}	I_C=10µA	70		V
BV_{CEO}	I_C=10mA	50		V
BV_{EBO}	I_E=10µA	5.0		V
$V_{CE(SAT)}$	I_C=10mA, I_B=1.0mA		0.125	V
$V_{BE(ON)}$	V_{CE}=10V, I_C=2.0mA	0.5	0.9	V
$V_{BE(SAT)}$	I_C=10mA, I_B=1.0mA		0.78	V
h_{FE}	V_{CE}=5.0V, I_C=2.0mA	400	800	
h_{FE}	V_{CE}=5.0V, I_C=100µA	350 TYP		
h_{fe}	V_{CE}=5.0V, I_C=2.0mA, f=1.0kHz	400	1200	
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		4.0	pF
NF	V_{CE}=5.0V, I_C=100µA, R_G=5.0kΩ, f=1.0kHz, BW=15.7kHz (2N5249A, PN5249A only)		3.0	dB

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