

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

2N4248
2N4249
2N4250
2N4250A

SILICON PNP TRANSISTOR

JEDEC TO-106 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4248 Series Types are Silicon PNP Transistors designed for low level - low noise amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N4248 2N4250	2N4249 2N4250A	UNIT
Collector-Base Voltage	V _{CB0}	40	60	V
Collector-Emitter Voltage	V _{CES}	40	60	V
Collector-Emitter Voltage	V _{CEO}	40	60	V
Emitter-Base Voltage	V _{EB0}	5.0	5.0	V
Power Dissipation	P _D	200	200	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-55 TO +150		°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL		2N4248		2N4249		2N4250		2N4250A		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =40V (2N4250A V _{CB} =50V)	10		10		10		10		nA
I _{EB0}	V _{EB} =3.0V	20		20		20		20		nA
BV _{CB0}	I _C =10μA	40		60		40		60		V
BV _{CES}	I _C =10μA	40		60		40		60		V
BV _{CEO}	I _C =5.0mA	40		60		40		60		V
BV _{EB0}	I _E =10μA	5.0		5.0		5.0		5.0		V
V _{CE(s)}	I _C =10mA, I _B =0.5mA		0.25		0.25		0.25		0.25	V
V _{BE(s)}	I _C =10mA, I _B =0.5mA		0.9		0.9		0.9		0.9	V
h _{FE}	V _{CE} =5.0V, I _C =100μA	50		100	300	250	700	250	700	
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	50		100		250		---		
h _{FE}	V _{CE} =5.0V, I _C =10mA	50		100		250		---		
f _T	V _{CE} =5.0V, I _C =0.5mA, f=20MHz	40		40		50		---		MHz
C _{ob}	V _{CB} =5.0V, f=1.0MHz	6.0		6.0		6.0		6.0		pF
C _{1B}	V _{EB} =0.5V, f=1.0MHz	16		16		16		---		pF
NF	Wide Band, V _{CE} =5.0V, I _C =20μA, R _s =100KΩ PBW=15.7kHz, f=10Hz TO 10kHz	---		3.0		2.0		2.0		dB
NF	Narrow Band, V _{CE} =5.0V, I _C =20μA, R _s =10KΩ PBW=150Hz, f=1.0kHz	---		3.0		2.0		2.0		dB