Central
Semiconductor Corp.
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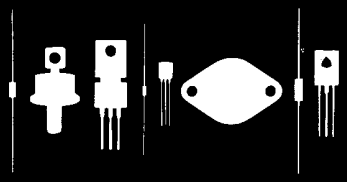

2N3246

NPN SILICON LOW NOISE TRANSISTOR

JEDEC TO-18 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N3246 is an NPN silicon transistor manufactured by the epitaxial planar process designed for small signal, low noise and low power audio amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	45	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	50	mA
Power Dissipation	P_D	350	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +200	°C
Thermal Resistance	Θ_{JA}	0.5	°C/mW

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	V_{CB}=40V		1.0	nA
I_{CBO}	V_{CB}=40V, T_A=150°C		2.0	µA
I_{EBO}	V_{EB}=8.0V		1.0	nA
BV_{CBO}	I_C=10µA	60		V
BV_{CEO}	I_C=1.0mA	45		V
BV_{EBO}	I_E=10µA	10		V
$V_{CE(SAT)}$	I_C=5.0mA, I_B=0.5mA		0.5	V
$V_{BE(SAT)}$	I_C=5.0mA, I_B=0.5mA	0.7	0.9	V
h_{FE}	V_{CE}=5.0V, I_C=1.0µA	150		
h_{FE}	V_{CE}=5.0V, I_C=10µA	200	600	
h_{FE}	V_{CE}=5.0V, I_C=100µA	300		
h_{FE}	V_{CE}=5.0V, I_C=500µA	350		
h_{FE}	V_{CE}=5.0V, I_C=1.0mA	400	-	
h_{FE}	V_{CE}=5.0V, I_C=10mA	-	800	
f_T	V_{CE}=5.0V, I_C=1.0mA, f=30MHz	60	180	MHz
h_{fe}	V_{CB}=6.0V, I_C=1.0mA, f=1.0kHz	200	600	
h_{ib}	V_{CB}=6.0V, I_C=1.0mA, f=1.0kHz	24	32	Ω
h_{ob}	V_{CB}=6.0V, I_C=1.0mA, f=1.0kHz	0.1	1.0	µmho
h_{rb}	V_{CB}=6.0V, I_C=1.0mA, f=1.0kHz		$6X10^{-4}$	
C_{ob}	V_{CB}=5.0V, I_E=0, f=1.0MHz		5.0	pF
NF	V_{CE}=5.0V, I_C=10µA, R_G=10kΩ, f=5.0Hz to 15kHz		2.0	dB

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