

2N2484

NPN SILICON TRANSISTOR



TO-18 CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N2484 type is an NPN silicon transistor designed for low noise amplifier applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

Collector-Base Voltage
 Collector-Emitter Voltage
 Emitter-Base Voltage
 Continuous Collector Current
 Power Dissipation
 Operating and Storage Junction Temperature
 Thermal Resistance

SYMBOL

V_{CB0} 60
 V_{CEO} 60
 V_{EBO} 6.0
 I_C 50
 P_D 360
 T_J, T_{stg} -65 to +200
 θ_{JA} 486

UNITS

V
 V
 V
 mA
 mW
 °C
 °C/W

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =45V		10	nA
I _{CBO}	V _{CB} =45V, T _A =150°C		10	μA
I _{CEO}	V _{CE} =5.0V		2.0	nA
I _{EBO}	V _{EB} =5.0V		10	nA
BV _{CB0}	I _C =10μA	60		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10μA	6.0		V
V _{CE(SAT)}	I _C =1.0mA, I _B =100μA		0.35	V
V _{BE(ON)}	V _{CE} =5.0V, I _C =100μA	0.5	0.7	V
h _{FE}	V _{CE} =5.0V, I _C =1.0μA	30		
h _{FE}	V _{CE} =5.0V, I _C =10μA	100	500	
h _{FE}	V _{CE} =5.0V, I _C =10μA, T _A =-55°C	20		
h _{FE}	V _{CE} =5.0V, I _C =100μA	175		
h _{FE}	V _{CE} =5.0V, I _C =500μA	200		
h _{FE}	V _{CE} =5.0V, I _C =1.0mA	250		
h _{FE}	V _{CE} =5.0V, I _C =10mA		800	
h _{fe}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz	150	900	
f _T	V _{CE} =5.0V, I _C =50μA, f=5.0MHz	15		MHz
f _T	V _{CE} =5.0V, I _C =0.5mA, f=30MHz	60		MHz
h _{ie}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz	3.5	24	kΩ
h _{oe}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz		40	μS
h _{re}	V _{CE} =5.0V, I _C =1.0mA, f=1.0kHz		800	x10 ⁻⁶
C _{ob}	V _{CB} =5.0V, I _E =0, f=140kHz		6.0	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=140kHz		6.0	pF

R1 (30-May 2012)

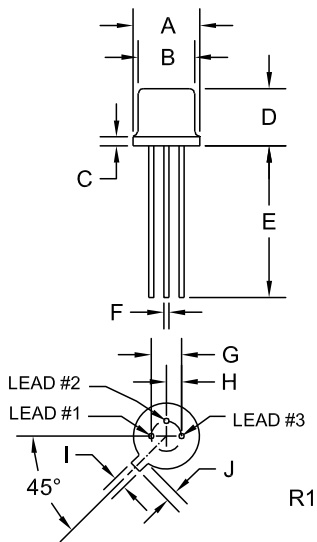
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MAX	UNITS
NF	$V_{CE}=5.0\text{V}$, $I_C=10\mu\text{A}$, $R_S=10\text{k}\Omega$ $BW=15.7\text{kHz}$, 3.0dB PTS @ 10Hz, 10kHz	3.0	dB
NF	$V_{CE}=5.0\text{V}$, $I_C=10\mu\text{A}$, $R_S=10\text{k}\Omega$, $f=100\text{Hz}$, $BW=20\text{Hz}$	10	dB
NF	$V_{CE}=5.0\text{V}$, $I_C=10\mu\text{A}$, $R_S=10\text{k}\Omega$, $f=1.0\text{kHz}$, $BW=200\text{Hz}$	3.0	dB
NF	$V_{CE}=5.0\text{V}$, $I_C=10\mu\text{A}$, $R_S=10\text{k}\Omega$, $f=10\text{kHz}$, $BW=2.0\text{kHz}$	2.0	dB

TO-18 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A (DIA)	0.209	0.230	5.31	5.84
B (DIA)	0.178	0.195	4.52	4.95
C	-	0.030	-	0.76
D	0.170	0.210	4.32	5.33
E	0.500	-	12.70	-
F (DIA)	0.016	0.019	0.41	0.48
G (DIA)	0.100		2.54	
H	0.050		1.27	
I	0.036	0.046	0.91	1.17
J	0.028	0.048	0.71	1.22

TO-18 (REV: R1)

LEAD CODE:

- 1) Emitter
- 2) Base
- 3) Collector

MARKING:
FULL PART NUMBER

R1 (30-May 2012)