

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)

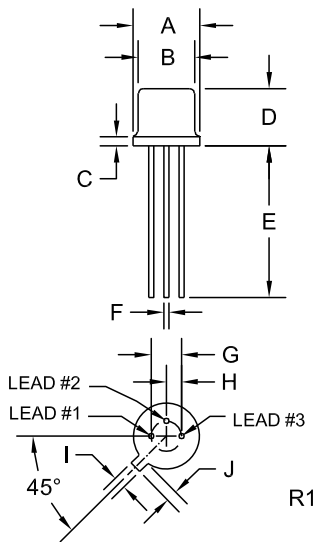
2N2484
NPN SILICON TRANSISTOR



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)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free quick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp.
145 Adams Avenue
Hauppauge, NY 11788 USA
Main Tel: (631) 435-1110
Main Fax: (631) 435-1824
Support Team Fax: (631) 435-3388
www.centrasemi.com

Worldwide Field Representatives:
www.centrasemi.com/wwreps

Worldwide Distributors:
www.centrasemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centrasemi.com/terms