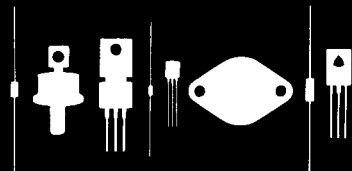


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145 Adams Avenue  
Hauppauge, New York 11788



2N1479  
2N1480  
2N1481  
2N1482

NPN SILICON TRANSISTOR

JEDEC TO-39 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N1479 series types are silicon NPN transistors manufactured by the epitaxial planar process, mounted in a hermetically sealed metal case designed for switching and amplifier applications.

MAXIMUM RATINGS ( $T_C=25^\circ\text{C}$  unless otherwise noted)

|                                            | SYMBOL                            | 2N1479<br>2N1481 | 2N1480<br>2N1482 | UNIT |
|--------------------------------------------|-----------------------------------|------------------|------------------|------|
| Collector-Base Voltage                     | V <sub>CB0</sub>                  | 60               | 100              | V    |
| Collector-Emitter Voltage                  | V <sub>CEV</sub>                  | 60               | 100              | V    |
| Collector-Emitter Voltage                  | V <sub>CEO</sub>                  | 40               | 55               | V    |
| Emitter-Base Voltage                       | V <sub>EB0</sub>                  | 6.0              | 6.0              | V    |
| Collector Current                          | I <sub>C</sub>                    | 1.5              | 1.5              | A    |
| Base Current                               | I <sub>B</sub>                    | 1.0              | 1.0              | A    |
| Power Dissipation                          | P <sub>D</sub>                    | 5.0              | 5.0              | W    |
| Operating and Storage Junction Temperature | T <sub>J</sub> , T <sub>STG</sub> | -65 TO +200      |                  | °C   |
| Thermal Resistance                         | θ <sub>JC</sub>                   | 35               |                  | °C/W |

ELECTRICAL CHARACTERISTICS ( $T_C=25^\circ\text{C}$  unless otherwise noted)

| SYMBOL                | TEST CONDITIONS                                                     | 2N1479 |         | 2N1480 |         | 2N1481 |         | 2N1482 |         | UNIT |
|-----------------------|---------------------------------------------------------------------|--------|---------|--------|---------|--------|---------|--------|---------|------|
|                       |                                                                     | MIN    | MAX     | MIN    | MAX     | MIN    | MAX     | MIN    | MAX     |      |
| I <sub>CB0</sub>      | V <sub>CB</sub> =30V                                                |        | 10      |        | 10      |        | 10      |        | 10      | μA   |
| I <sub>CB0</sub>      | V <sub>CB</sub> =30V, T <sub>C</sub> =150°C                         |        | 500     |        | 500     |        | 500     |        | 500     | μA   |
| I <sub>EB0</sub>      | V <sub>EB</sub> =6.0V                                               |        | 10      |        | 10      |        | 10      |        | 10      | μA   |
| V <sub>CEV</sub>      | V <sub>EB</sub> =1.5V, I <sub>C</sub> =0.25mA                       | 60     |         | 100    |         | 60     |         | 100    |         | V    |
| V <sub>CEO</sub>      | I <sub>C</sub> =50mA                                                | 40     |         | 55     |         | 40     |         | 55     |         | V    |
| V <sub>CE</sub> (SAT) | I <sub>C</sub> =200mA, I <sub>B</sub> =10mA                         |        | -       |        | -       |        | 1.4     |        | 1.4     | V    |
| V <sub>CE</sub> (SAT) | I <sub>C</sub> =200mA, I <sub>B</sub> =20mA                         |        | 1.4     |        | 1.4     |        | -       |        | -       | V    |
| V <sub>BE</sub> (ON)  | V <sub>CE</sub> =4.0V, I <sub>C</sub> =200mA                        |        | 3.0     |        | 3.0     |        | 3.0     |        | 3.0     | V    |
| h <sub>FE</sub>       | V <sub>CE</sub> =4.0V, I <sub>C</sub> =200mA                        | 20     | 60      | 20     | 60      | 35     | 100     | 35     | 100     |      |
| h <sub>fe</sub>       | V <sub>CE</sub> =4.0V, I <sub>C</sub> =5.0mA                        |        | 50 TYP  |        | 50 TYP  |        | 50 TYP  |        | 50 TYP  |      |
| t <sub>ON</sub>       | I <sub>C</sub> =200mA, I <sub>B1</sub> =20mA, I <sub>B2</sub> =85mA |        | 1.2 TYP |        | 1.2 TYP |        | 1.2 TYP |        | 1.2 TYP | μs   |
| t <sub>OFF</sub>      | I <sub>C</sub> =200mA, I <sub>B1</sub> =20mA, I <sub>B2</sub> =85mA |        | 1.6 TYP |        | 1.6 TYP |        | 1.6 TYP |        | 1.6 TYP | μs   |
| C <sub>ob</sub>       | V <sub>CB</sub> =40V                                                |        | 150 TYP |        | 150 TYP |        | 150 TYP |        | 150 TYP | pF   |
| f <sub>αB</sub>       | V <sub>CB</sub> =28V, I <sub>C</sub> =5.0mA                         |        | 1.5 TYP |        | 1.5 TYP |        | 1.5 TYP |        | 1.5 TYP | MHz  |

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## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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

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### DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2<sup>nd</sup> 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

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### 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).

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### CONTACT US

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