SILICON HIGH VOLTAGE NPN TRANSISTOR



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR BF259 is a silicon NPN transistor designed for high voltage applications.



MARKING: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C unless otherwise noted)

| | SYMBOL | | UNITS |
|--|-----------------------------------|-------------|-------|
| Collector-Base Voltage | V_{CBO} | 30 | V |
| Collector-Emitter Voltage | V_{CEO} | 25 | V |
| Emitter-Base Voltage | V_{EBO} | 4.0 | V |
| Continuous Collector Current | IC | 25 | mA |
| Power Dissipation | P_{D} | 250 | mW |
| Operating and Storage Junction Temperature | T _J , T _{stg} | -65 to +200 | °C |
| Thermal Resistance | $\Theta_{\sf JA}$ | 175 | °C/W |
| Thermal Resistance | Θ JC | 30 | °C/W |

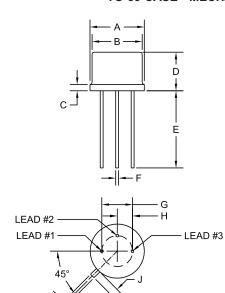
ELECTRICAL CHARACTERISTICS: (T_A=25°C unless otherwise noted)

| SYMBOL I _{CBO} | TEST CONDITIONS V _{CB} =250V | MIN | ΤΎΡ | MAX 50 | UNITS nA |
|----------------------------|---|-----|-----|---------------|-------------|
| BV _{CBO} | I _C =100μA | 300 | | | V |
| BV_{CEO} | I _C =10mA | 300 | | | V |
| BVEBO | I _E =100μA | 5.0 | | | V |
| V _{CE} (SAT) | I _C =30mA, I _B =6.0mA | | | 1.0 | V |
| h _{FE} | V_{CE} =10V, I_{C} =30mA | 25 | | | |
| f _T | V _{CE} =10V, I _C =15mA | | 90 | | MHz |

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TO-39 CASE - MECHANICAL OUTLINE



R1

| DIMENSIONS | | | | | | |
|------------------|--------|-------|-------------|------|--|--|
| | INCHES | | MILLIMETERS | | | |
| SYMBOL | MIN | MAX | MIN | MAX | | |
| A (DIA) | 0.335 | 0.370 | 8.51 | 9.40 | | |
| B (DIA) | 0.315 | 0.335 | 8.00 | 8.51 | | |
| С | - | 0.040 | - | 1.02 | | |
| D | 0.240 | 0.260 | 6.10 | 6.60 | | |
| E | 0.500 | - | 12.70 | - | | |
| F (DIA) | 0.016 | 0.021 | 0.41 | 0.53 | | |
| G (DIA) | 0.200 | | 5.08 | | | |
| Н | 0.100 | | 2.54 | | | |
| | 0.028 | 0.034 | 0.71 | 0.86 | | |
| J | 0.029 | 0.045 | 0.74 | 1.14 | | |
| TO 20 (DEV/, D4) | | | | | | |

TO-39 (REV: R1)

LEAD CODE:

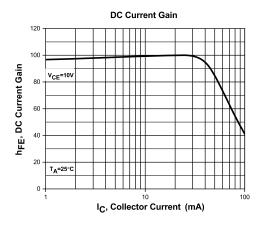
- 1) Emitter
- 2) Base
- 3) Collector

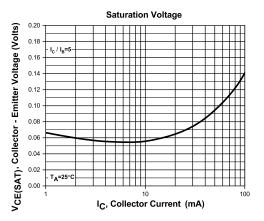
MARKING: FULL PART NUMBER

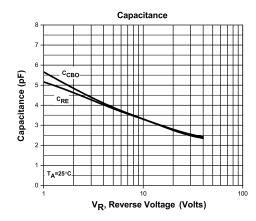
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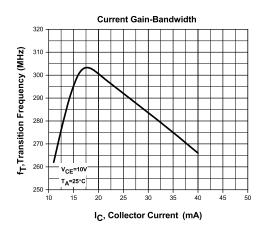


TYPICAL ELECTRICAL CHARACTERISTICS





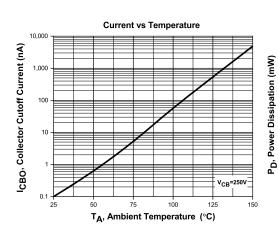


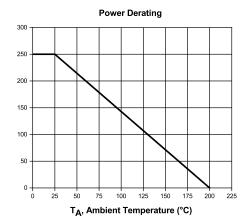


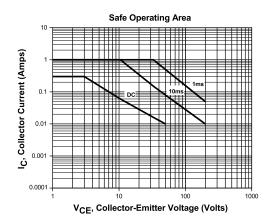
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TYPICAL ELECTRICAL CHARACTERISTICS







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 guick 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

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