

TECHNICAL DATA DATA SHEET 4802, REV. A

# HERMETIC POWER SCHOTTKY RECTIFIER 175°C Maximum Operation Temperature

**DESCRIPTION:** A 60-VOLT, 35 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-254 PACKAGE.

## **MAXIMUM RATINGS**

ALL RATINGS ARE @  $T_C = 25$  °C UNLESS OTHERWISE SPECIFIED.

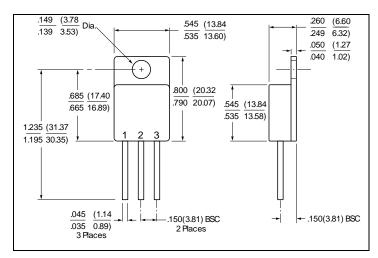
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|---|----------------|-----------------|-------|--|
| RATING  | SYMBOL         | MAX.            | UNITS |  |
| PEAK INVERSE VOLTAGE  | PIV            | 60              | Volts |  |
| MAXIMUM DC OUTPUT CURRENT (@ T <sub>C</sub> =100 <sup>O</sup> C) (Single, Doubler)  | Io             | 35              | Amps  |  |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine)   |                | 400             | Amps  |  |
| MAXIMUM JUNCTION CAPACITANCE (V <sub>r</sub> =5V)   | Ст             | 2300            | pF    |  |
| MAXIMUM THERMAL RESISTANCE (Per leg)  | $R_{	heta JC}$ | 1.15            | °C/W  |  |
| MAXIMUM OPERATING TEMPERATURE RANGE   | Top/Tstg       | -55 to<br>+ 175 | °C    |  |
| MAXIMUM STORAGE TEMPERATURE RANGE   | Top/Tstg       | -55 to<br>+ 175 | °C    |  |

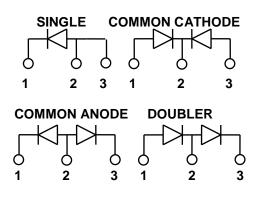
#### **ELECTRICAL CHARACTERISTICS**

| CHARACTERISTIC  |                          | SYMBOL         | MAX. | UNITS |
|---|--------------------------|----------------|------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I <sub>f</sub> = 35 Amps) |                          |                |      |       |
|   | T <sub>J</sub> = 25 °C   | $V_{f}$        | 0.83 | Volts |
|   | T <sub>J</sub> = 125 °C  |                | 0.92 |       |
| MAXIMUM REVERSE CURRENT (I <sub>r</sub> @ 60 V PIV)             |                          |                |      |       |
|   | T <sub>J</sub> = 25 °C   | I <sub>r</sub> | 0.5  | mA    |
|   | T <sub>.1</sub> = 125 °C |                | 175  |       |

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## Mechanical Dimensions: In inches / mm





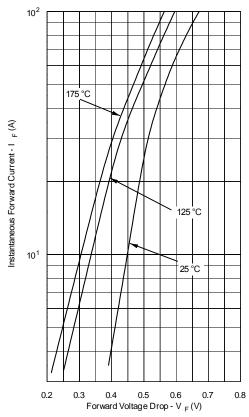
**TO-254** 

## **PINOUT TABLE**

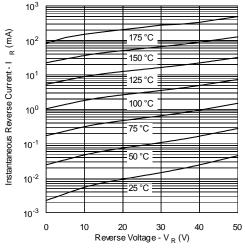
| TYPE                               | PIN 1     | PIN 2          | PIN 3     |
|------------------------------------|-----------|----------------|-----------|
| SINGLE RECTIFIER                   | CATHODE   | ANODE          | ANODE     |
| DUAL RECTIFIER, COMMON CATHODE (P) | ANODE 1   | COMMON CATHODE | ANODE 2   |
| DUAL RECTIFIER, COMMON ANODE (N)   | CATHODE 1 | COMMON ANODE   | CATHODE 2 |
| DUAL RECTIFIER, DOUBLER (D)        | ANODE     | CATHODE/ ANODE | CATHODE   |

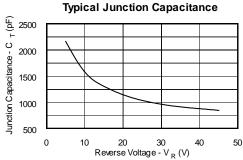
Curves shown are for bare die only.

## **Typical Forward Characteristics**



## Typical Reverse Characteristics





#### **SENSITRON**

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