

TECHNICAL DATA DATA SHEET 1159, REV. -

HERMETIC POWER SCHOTTKY RECTIFIER 200°C Maximum Operation Temperature

DESCRIPTION: A 100 VOLT, 30/45 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC TO-258 PACKAGE.

MAXIMUM RATINGS

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

| RATING | | MAX. | UNITS |
|---|----------------|-----------------|-------|
| PEAK INVERSE VOLTAGE | PIV | 100 | Volts |
| MAXIMUM DC OUTPUT CURRENT (@ T _C =100 ^O C) (Single, Doubler) | Io | 30 | Amps |
| MAXIMUM DC OUTPUT CURRENT (@ T _C =100 ^O C) (Common Cathode, Common Anode) | lo | 45 | Amps |
| MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT (t=8.3ms, Sine) | | 200 | Amps |
| MAXIMUM JUNCTION CAPACITANCE (V _r =5V) | C _T | 1000 | pF |
| MAXIMUM THERMAL RESISTANCE (Single) | $R_{	heta JC}$ | 0.77 | °C/W |
| MAXIMUM THERMAL RESISTANCE (Common Cathode, Common Anode, Doubler) | $R_{	heta JC}$ | 0.39 | °C/W |
| MAXIMUM OPERATING TEMPERATURE RANGE | | -65 to + 200 | °C |
| MAXIMUM STORAGE TEMPERATURE RANGE | | -65 to + 175 | °C |

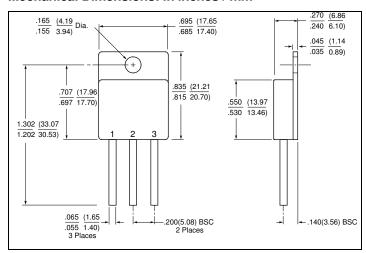
ELECTRICAL CHARACTERISTICS

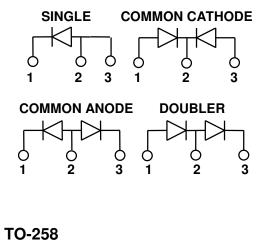
| CHARACTERISTIC | | SYMBOL | MAX. | UNITS |
|---|-------------------------|----------------|------|-------|
| MAXIMUM FORWARD VOLTAGE DROP, Pulsed (I _f = 30 Amps) | | | | |
| | T _J = 25 °C | V_{f} | 1.01 | Volts |
| | T _J = 125 °C | | 0.85 | |
| MAXIMUM REVERSE CURRENT (I _r @ 100 V PIV) | | | | |
| | T _J = 25 °C | l _r | 0.75 | mA |
| | T _J = 125 °C | | 15 | |

SENSITRON

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Mechanical Dimensions: In inches / mm



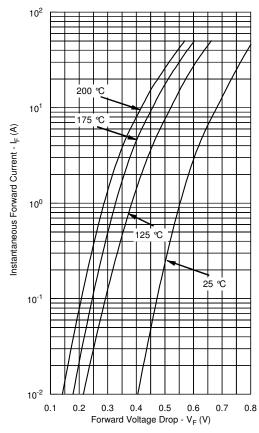


PINOUT TABLE

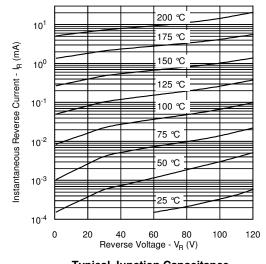
| TYPE | PIN 1 | PIN 2 | PIN 3 |
|------------------------------------|-----------|----------------|-----------|
| SINGLE RECTIFIER | CATHODE | ANODE | ANODE |
| DUAL RECTIFIER, COMMON CATHODE (P) | ANODE 1 | COMMON CATHODE | ANODE 2 |
| DUAL RECTIFIER, COMMON ANODE (N) | CATHODE 1 | COMMON ANODE | CATHODE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

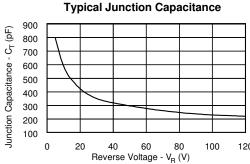
Curves shown are for bare die only.

Typical Forward Characteristics



Typical Reverse Characteristics







TECHNICAL DATA

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