

TECHNICAL DATA  
DATA SHEET 4673, REV. -**HERMETIC POWER SCHOTTKY RECTIFIER**  
**Very Low Forward Voltage****Applications:**

· Switching Power Supply · Converters · Free-Wheeling Diodes · Polarity Protection Diode

**Features:**

- Soft Reverse Recovery at Low and High Temperature
- Very low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Capacity
- Guard Ring for Enhanced Durability and Long Term Reliability
- Guaranteed Reverse Avalanche Characteristics

**Maximum Ratings:**

| Characteristics                                  | Symbol          | Condition   | Max.        | Units |
|--|-----------------|---|-------------|-------|
| Peak Inverse Voltage                             | $V_{RWM}$       | -   | 45          | V     |
| Max. Average Forward Current                     | $I_{F(AV)}$     | 50% duty cycle, rectangular wave form (Single/Doubler)              | 7.5         | A     |
| Max. Average Forward Current                     | $I_{F(AV)}$     | 50% duty cycle, rectangular wave form (Common Cathode/Common Anode) | 15          | A     |
| Max. Peak One Cycle Non-Repetitive Surge Current | $I_{FSM}$       | 8.3 ms, half Sine wave (per leg)                                    | 140         | A     |
| Max. Thermal Resistance                          | $R_{\theta JC}$ | (Single)  | 1.36        | °C/W  |
| Max. Junction Temperature                        | $T_J$           | -   | -65 to +175 | °C    |
| Max. Storage Temperature                         | $T_{stg}$       | -   | -65 to +175 | °C    |

**Electrical Characteristics:**

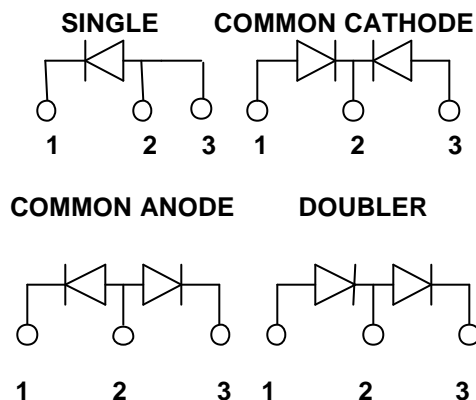
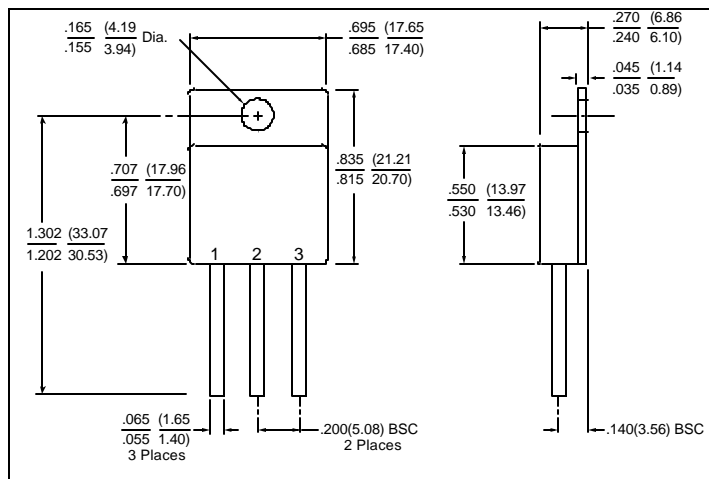
| Characteristics           | Symbol   | Condition  | Max. | Units         |
|---------------------------|----------|--|------|---------------|
| Max. Forward Voltage Drop | $V_{F1}$ | @ 7.5A, Pulse, $T_J = 25\text{ }^\circ\text{C}$ (per leg)  | 0.73 | V             |
|                           | $V_{F2}$ | @ 7.5A, Pulse, $T_J = 125\text{ }^\circ\text{C}$ (per leg)   | 0.66 | V             |
| Max. Reverse Current      | $I_{R1}$ | @ $V_R = 45\text{V}$ , Pulse, $T_J = 25\text{ }^\circ\text{C}$ (per leg)   | 0.2  | $\mu\text{A}$ |
|                           | $I_{R2}$ | @ $V_R = 45\text{V}$ , Pulse, $T_J = 125\text{ }^\circ\text{C}$ (per leg)  | 7.5  | mA            |
| Max. Junction Capacitance | $C_T$    | @ $V_R = 5\text{V}$ , $T_C = 25\text{ }^\circ\text{C}$<br>$f_{SIG} = 1\text{MHz}$ ,<br>$V_{SIG} = 50\text{mV}$ (p-p) (per leg) | 400  | pF            |

**SENSITRON**

**TECHNICAL DATA**

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**Mechanical Dimensions: In Inches / mm**

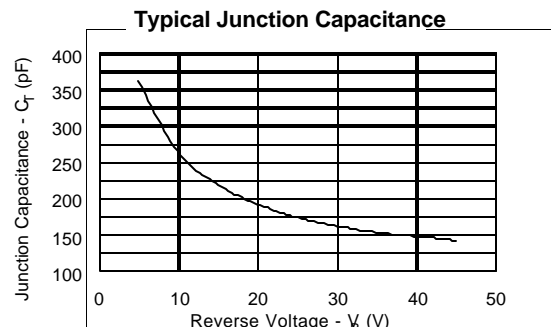
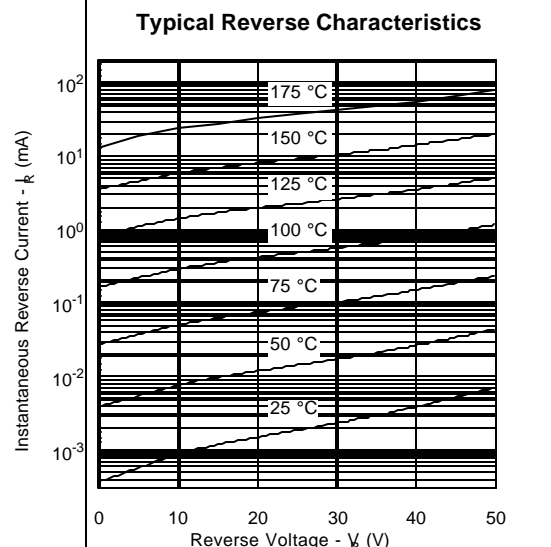
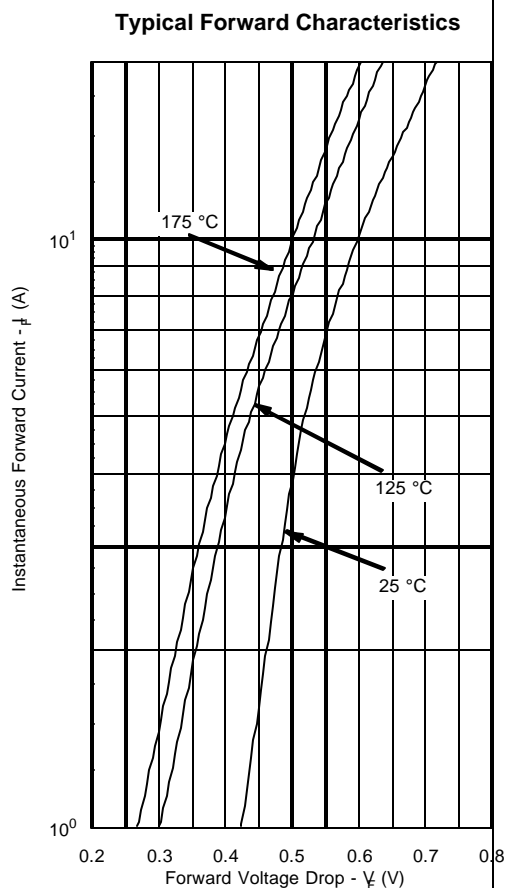


**TO-258**

**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   |

**Note:** The  $V_f$  curves shown are for the unpackaged die only.



**TECHNICAL DATA**

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