TECHNICAL DATA DATA SHEET 4675, REV. A

HERMETIC POWER SCHOTTKY RECTIFIER Low Forward Voltage

Applications:

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

Features:

- Soft Reverse Recovery at Low and High Temperature
- 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} | - | 200 | V |
| Max. Average Forward Current | I _{F(AV)} | 50% duty cycle, rectangular wave form (Single/Doubler) | 7.5 | Α |
| 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 | Α |
| Max. Thermal Resistance | $R_{\theta JC}$ | (Single) | 1.36 | °C/W |
| Max. Junction Temperature | TJ | - | -65 to +200 | °C |
| Max. Storage Temperature | T _{stg} | - | -65 to +200 | °C |

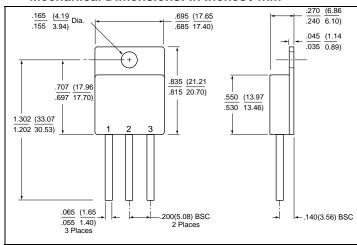
Electrical Characteristics:

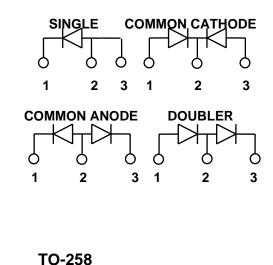
| Characteristics | Symbol | Condition | Max. | Units |
|---------------------------|----------|--|------|-------|
| Max. Forward Voltage Drop | V_{F1} | @ 7.5A, Pulse, T _J = 25 °C | 1.01 | V |
| | | (per leg) | | |
| | V_{F2} | @ 7.5A, Pulse, T _J = 125 °C | 0.85 | V |
| | | (per leg) | | |
| Max. Reverse Current | I_{R1} | @V _R = 200V, Pulse, | 0.05 | μΑ |
| | | $T_J = 25 ^{\circ}\text{C} \text{ (per leg)}$ | | |
| | I_{R2} | @V _R = 200V, Pulse, | 0.5 | mA |
| | | $T_J = 125 ^{\circ}\text{C} \text{ (per leg)}$ | | |
| Max. Junction Capacitance | C_{T} | $@V_R = 5V, T_C = 25 ^{\circ}C$ | 150 | pF |
| | | $f_{SIG} = 1MHz,$ | | |
| | | $V_{SIG} = 50 \text{mV (p-p) (per leg)}$ | | |

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Mechanical Dimensions: In Inches / mm



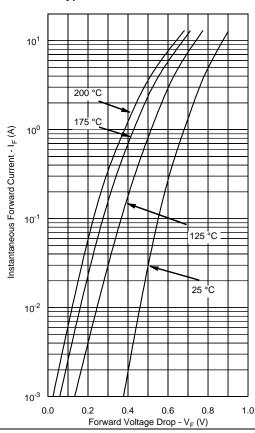


PINOUT TABLE

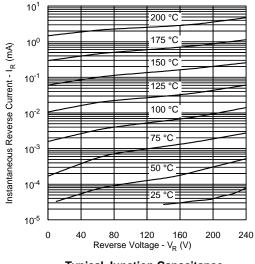
| TYPE | PIN 1 | PIN 2 | PIN 3 |
|------------------------------------|-----------|----------------|-----------|
| SINGLE RECTIFIER | CATHODE | ANODE | ANODE |
| DUAL RECTIFIER, COMMON CATHODE (P) | ANODE 1 | COMMON CATHODE | ANODE 2 |
| DUAL RECTIFIER, COMMON ANODE (N) | CATHODE 1 | COMMON ANODE | CATHODE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

Note: The V_f curves shown are for the un-packaged die only.

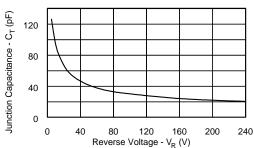
Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance



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