TECHNICAL DATA DATA SHEET 4685, REV. A

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

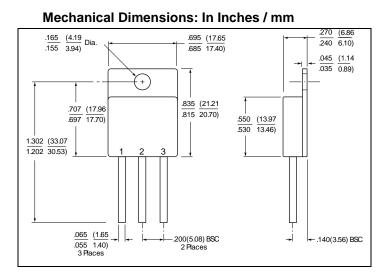
Maximum Ratings:

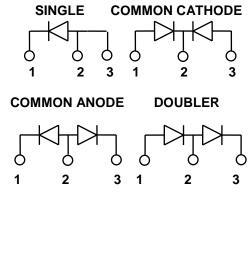
| Characteristics | Symbol | Condition | Max. | Units |
|------------------------------------------------------|---------------------|---------------------------------------------------------------------------|-------------|-------|
| Peak Inverse Voltage | V _{RWM} | - | 15 | V |
| Max. Average Forward Current | I _{F(AV)} | 50% duty cycle, rectangular wave form (Single/Doubler) | 15 | A |
| Max. Average Forward Current | I _{F(AV)} | 50% duty cycle, rectangular wave form (Common Cathode/Common Anode) | 30 | A |
| Max. Peak One Cycle Non- Repetitive Surge Current | I _{FSM} | 8.3 ms, half Sine wave (per leg) | 200 | A |
| Max. Thermal Resistance | $R_{	ext{	heta}JC}$ | (Common Cathode/Common Anode/Doubler) (per leg) | 2.82 | °C/W |
| Max. Junction Temperature | ΤJ | - | -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} | @ 15A, Pulse, T _J = 25 °C | 0.46 | V |
| | | (per leg) | | |
| | V _{F2} | @ 15A, Pulse, T _J = 125 °C | 0.42 | V |
| | | (per leg) | | |
| Max. Reverse Current | I _{R1} | $@V_R = 15V$, Pulse, | 7 | mA |
| | | $T_J = 25 \ ^{\circ}C \ (per \ leg)$ | | |
| | I _{R2} | $@V_R = 15V$, Pulse, | 340 | mA |
| | | $T_J = 125 \ ^{\circ}C \ (per leg)$ | | |
| Max. Junction Capacitance | CT | @V _R = 5V, T _C = 25 °C | 1200 | pF |
| | | f _{SIG} = 1MHz, | | |
| | | $V_{SIG} = 50 \text{mV} (\text{p-p}) (\text{per leg})$ | | |

SENSITRON TECHNICAL DATA DATA SHEET 4685, REV. A





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PINOUT TABLE

| ТҮРЕ | 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 |

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