

TECHNICAL DATA DATA SHEET 4771, REV. A

HERMETIC SCHOTTKY RECTIFIER Very Low Forward Voltage Drop

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} | - | 60 | V |
| Max. Average Forward Current | $I_{F(AV)}$ | 50% duty cycle, rectangular wave form (Single) | 15 | А |
| Max. Peak One Cycle Non- Repetitive Surge Current | I _{FSM} | 8.3 ms, half Sine wave (per leg) | 280 | Α |
| Non-Repetitive Avalanche Energy | E _{AS} | $T_J = 25 ^{\circ}\text{C}, I_{AS} = 3.0 \text{A}, \\ L = 4.4 \text{mH (per leg)}$ | 20 | mJ |
| Repetitive Avalanche Current | I _{AR} | I_{AS} decay linearly to 0 in 1 μ s f limited by T_J max V_A =1.5 V_R | 3.0 | Α |
| Maximum Thermal Resistance | $R_{	ext{	hetaJC}}$ | Per Package | 1.21 | °C/W |
| Max. Junction Temperature | TJ | - | -65 to +150 | °C |
| Max. Storage Temperature | T_{stg} | - | -65 to +150 | °C |

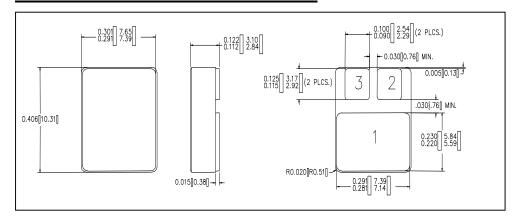
Electrical Characteristics

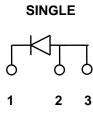
| Characteristics | Symbol | Condition | Max. | Units |
|---------------------------|-----------------|---------------------------------------|------|-------|
| Max. Forward Voltage Drop | V _{F1} | @ 15A, Pulse, T _J = 25 °C | 0.65 | V |
| (per leg) | V_{F2} | @ 15A, Pulse, T _J = 125 °C | 0.60 | V |
| Max. Reverse Current | I _{R1} | @V _R = 60V, Pulse, | 2.0 | mA |
| | | T _J = 25 °C | | |
| (per leg) | I _{R2} | $@V_R = 60V$, Pulse, | 140 | mA |
| | | T _J = 125 °C | | |
| Max. Junction Capacitance | C _T | $@V_R = 5V, T_C = 25 ^{\circ}C$ | 800 | pF |
| (per leg) | | $f_{SIG} = 1MHz,$ | | |
| | | $V_{SIG} = 50 \text{mV (p-p)}$ | | |

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Mechanical Dimensions: in Inches / mm

LCC-5





PINOUT TABLE

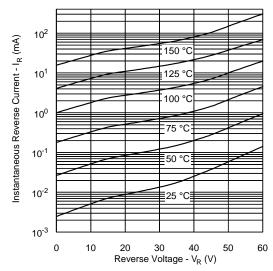
| DEVICE TYPE | PIN 1 | PIN 2 | PIN 3 |
|------------------|---------|-------|-------|
| SINGLE RECTIFIER | CATHODE | ANODE | ANODE |

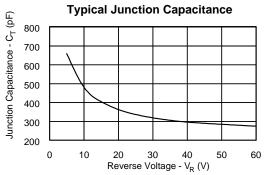
Note: The V_f curves shown are for the SD125SA60 unpackaged die only.

Typical Forward Characteristics

10¹ 150 °C 125 °C 10⁰ 125 °C 10⁰ 125 °C 10⁰ 10

Typical Reverse Characteristics







TECHNICAL DATA

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