

TECHNICAL DATA DATA SHEET 4767, REV. A

# HERMETIC SCHOTTKY RECTIFIER Low Forward Voltage Drop

## 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**

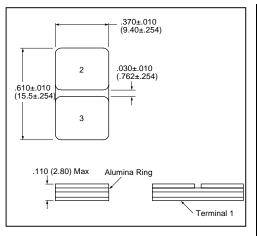
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	150	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Single)	60	Α
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Common Cathode)	120	Α
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine wave (per leg)	860	Α
Non-Repetitive Avalanche Energy	E <sub>AS</sub>	$T_J = 25 ^{\circ}\text{C}, I_{AS} = 3.0 \text{A},$ L = 4.4 mH (per leg)	20	mJ
Repetitive Avalanche Current	I <sub>AR</sub>	$I_{AS}$ decay linearly to 0 in 1 μs $f$ limited by $T_J$ max $V_A$ =1.5 $V_R$	3.0	A
Maximum Thermal Resistance	$R_{ heta JC}$	DC operation	0.18	°C/W
Max. Junction Temperature	TJ	-	-65 to +175	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +175	°C

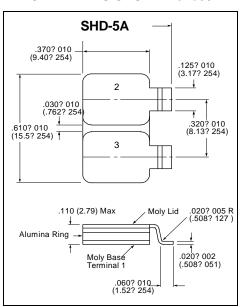
# **Electrical Characteristics**

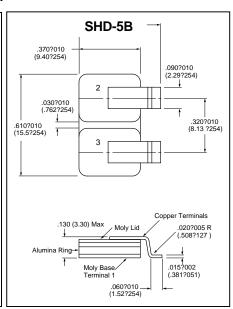
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 60A, Pulse, T <sub>J</sub> = 25 °C	0.91	\ \
(per leg)	$V_{F2}$	@ 60A, Pulse, T <sub>J</sub> = 125 °C	0.75	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 150V, Pulse,	1.5	mA
		T <sub>J</sub> = 25 °C		
(per leg)	I <sub>R2</sub>	@V <sub>R</sub> = 150V, Pulse,	24	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	C <sub>T</sub>	$@V_R = 5V, T_C = 25 °C$	1500	pF
(per leg)		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

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### **MECHANICAL DIMENSIONS: In Inches / mm**



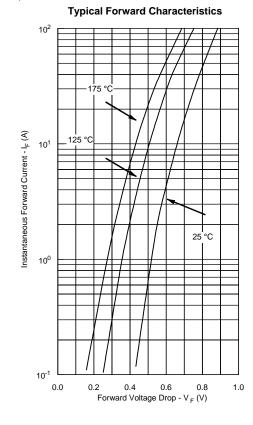


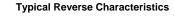


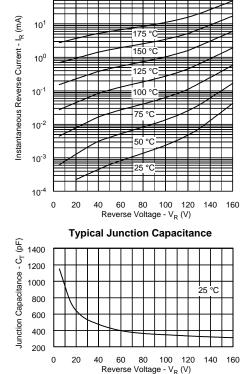
1 2 3 PINOUT TABLE

DEVICE TYPEPIN 1PIN 2PIN 3DUAL RECTIFIER, COMMON CATHODE (P)COMMON CATHODEANODEANODE

**Note:** The V<sub>f</sub> curves shown are for the SD200SC150 unpackaged die only.









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