

TECHNICAL DATA DATA SHEET 4766, REV. B

# 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**

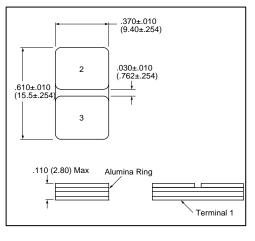
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	60	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Single)	60	Α
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Common Cathode)	120	Α
Max. Peak One Cycle 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 $\mu$ s $f$ limited by $T_J$ max $V_A$ =1.5 $V_R$	3.0	А
Maximum Thermal Resistance	$R_{ heta JC}$	DC operation	0.18	°C/W
Max. Junction Temperature	$T_J$	-	-65 to +175	°C
Max. Storage Temperature	$T_{stg}$	-	-65 to +175	°C

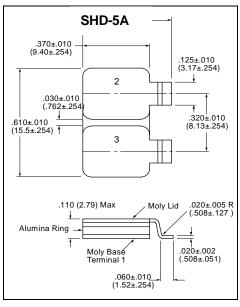
## **Electrical Characteristics**

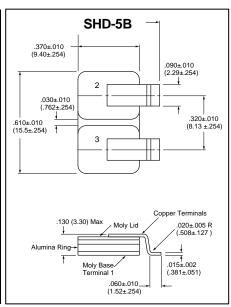
Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 60A, Pulse, T <sub>J</sub> = 25 °C	0.76	V
(per leg)	$V_{F2}$	@ 60A, Pulse, T <sub>J</sub> = 125 °C	0.69	V
Max. Reverse Current	I <sub>R1</sub>	$@V_R = 60V$ , Pulse,	1.2	mA
		T <sub>J</sub> = 25 °C		
(per leg)	$I_{R2}$	$@V_R = 60V$ , Pulse,	90	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	$C_{T}$	$@V_R = 5V, T_C = 25  ^{\circ}C$	2600	pF
(per leg)		$f_{SIG} = 1MHz,$		
		$V_{SIG} = 50 \text{mV (p-p)}$		

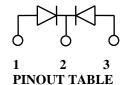
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#### **MECHANICAL DIMENSIONS: In Inches / mm**



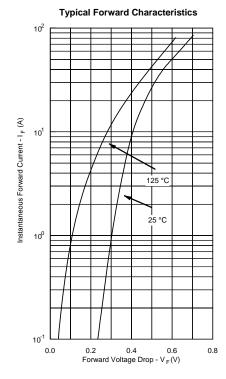


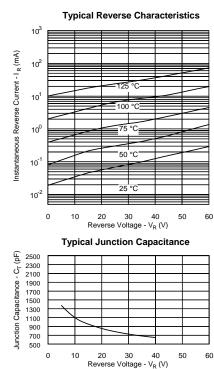




DEVICE TYPEPIN 1PIN 2PIN 3DUAL RECTIFIER, COMMON CATHODE (P)COMMON CATHODEANODEANODE

**Note:** The V<sub>f</sub> curves shown are for the SD200SB60 unpackaged die only.





SHD118523 SHD118523A SHD118523B

SENSITRON SEMICONDUCTOR

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