## SENSITRON SEMICONDUCTOR

TECHNICAL DATA DATA SHEET 4604, 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

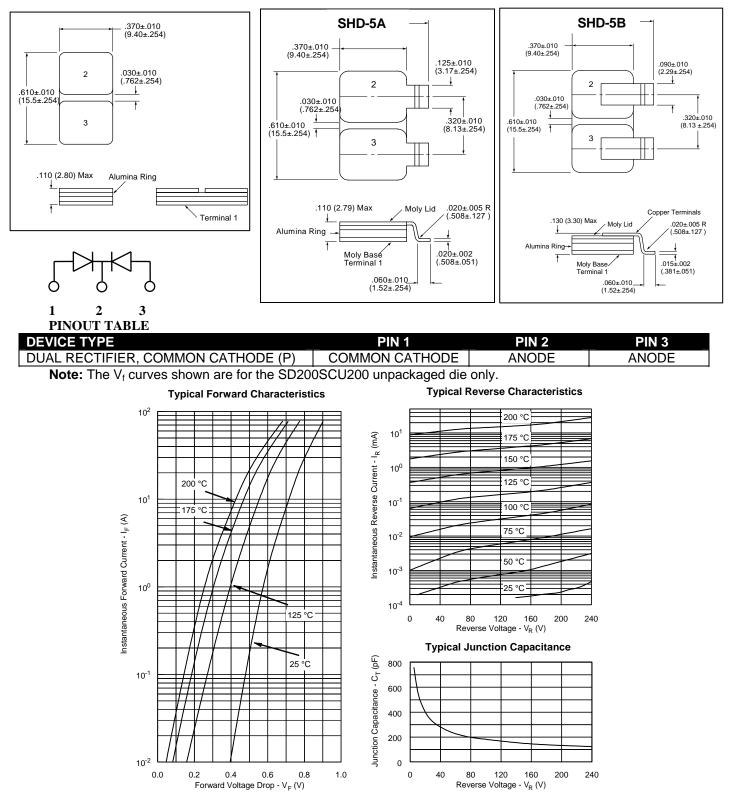
### **Maximum Ratings**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V <sub>RWM</sub>	-	200	V
Max. Average Forward Current	I <sub>F(AV)</sub>	50% duty cycle, rectangular wave form (Single)	60	A
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form (Common Cathode)	120	A
Max. Peak One Cycle Non- Repetitive Surge Current	I <sub>FSM</sub>	8.3 ms, half Sine wave (per leg)	860	A
Non-Repetitive Avalanche Energy	E <sub>AS</sub>	T <sub>J</sub> = 25 °C, I <sub>AS</sub> = 3.0 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 <sub>J</sub> max V <sub>A</sub> =1.5V <sub>R</sub>	3.0	A
Maximum Thermal Resistance	$R_{ ext{ heta}JC}$	DC operation	0.18	°C/W
Max. Junction Temperature	TJ	-	-65 to +200	°C
Max. Storage Temperature	T <sub>stg</sub>	-	-65 to +200	°C

#### **Electrical Characteristics**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V <sub>F1</sub>	@ 60A, Pulse, T <sub>J</sub> = 25 °C	0.95	V
(per leg)	V <sub>F2</sub>	@ 60A, Pulse, T <sub>J</sub> = 125 °C	0.79	V
Max. Reverse Current	I <sub>R1</sub>	@V <sub>R</sub> = 200V, Pulse,	0.3	mA
		$T_J = 25 \ ^{\circ}C$		
(per leg)	I <sub>R2</sub>	@V <sub>R</sub> = 200V, Pulse,	3.0	mA
		T <sub>J</sub> = 125 °C		
Max. Junction Capacitance	CT	@V <sub>R</sub> = 5V, T <sub>C</sub> = 25 °C	900	pF
(per leg)		f <sub>SIG</sub> = 1MHz,		
		$V_{SIG} = 50 \text{mV} (\text{p-p})$		

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**MECHANICAL DIMENSIONS: In Inches / mm** 

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