SENSITRON SEMICONDUCTOR

SHD118545 SHD118545A SHD118545B

TECHNICAL DATA DATA SHEET 4767, REV. B

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

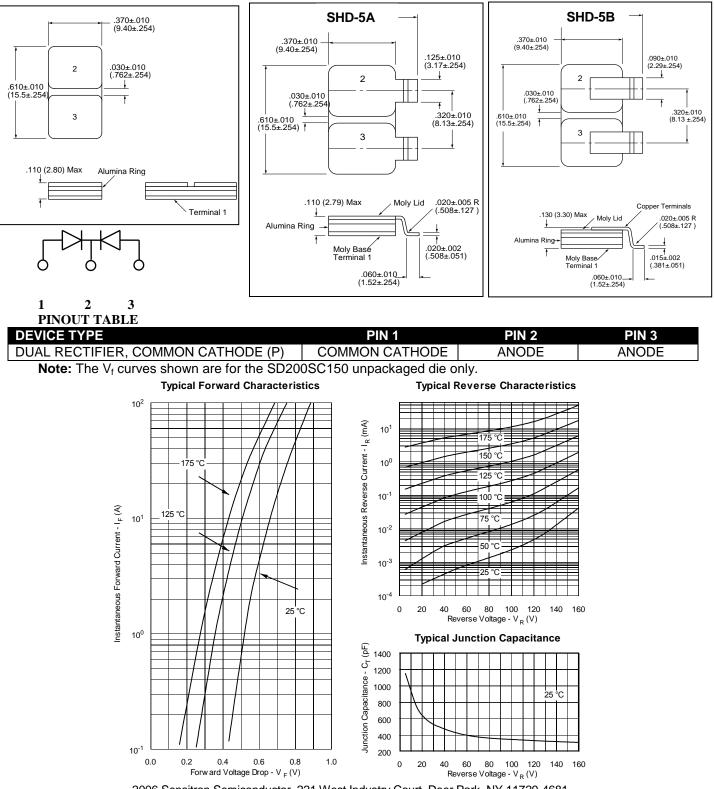
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V _{RWM}	-	150	V
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form (Single)	60	A
Max. Average Forward Current	I _{F(AV)}	50% duty cycle, rectangular wave form (Common Cathode)	120	A
Max. Peak One Cycle Non- Repetitive Surge Current	I _{FSM}	8.3 ms, half Sine wave (per leg)	860	A
Non-Repetitive Avalanche Energy	E _{AS}	$T_J = 25 \text{ °C}, I_{AS} = 3.0 \text{ A},$ L = 4.4 mH (per leg)	20	mJ
Repetitive Avalanche Current	I _{AR}	I_{AS} decay linearly to 0 in 1 µs f limited by T _J max V _A =1.5V _R	3.0	A
Maximum Thermal Resistance (per leg)	$R_{ ext{ heta}JC}$	DC operation	3.2	°C/W
Max. Junction Temperature	TJ	-	-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 _J = 25 °C	0.91	V
(per leg)	V _{F2}	@ 60A, Pulse, T _J = 125 °C	0.75	V
Max. Reverse Current	I _{R1}	@V _R = 150V, Pulse,	1.5	mA
		T _J = 25 °C		
(per leg)	I _{R2}	@V _R = 150V, Pulse,	24	mA
		T _J = 125 °C		
Max. Junction Capacitance	CT	@V _R = 5V, T _C = 25 °C	1500	pF
(per leg)		f _{SIG} = 1MHz,		
		$V_{SIG} = 50 \text{mV} (\text{p-p})$		

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MECHANICAL DIMENSIONS: In Inches / mm

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