

TECHNICAL DATA  
DATA SHEET 5365, REV. -

## HERMETIC FAST RECOVERY RECTIFIER HIGH VOLTAGE

### Features:

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- Very High Surge Capacity
- Very suitable for medium to high frequency applications (upto 40 kHz)
- Soft Reverse Recovery at Low and High Temperature
- $T_{rr}$  guaranteed lower than 0.5 $\mu$ sec
- For ceramic seals use part number prefix SHDC
- Different Lead-bend options available
- Electrically / Mechanically Stable during and after Packaging

### Maximum Ratings:

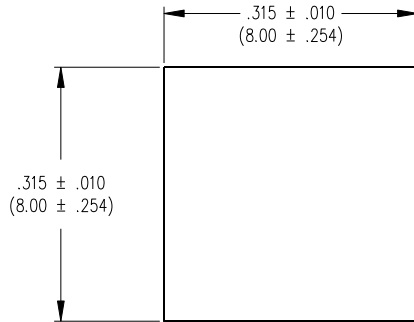
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	1200	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form, $T_C = 65^\circ\text{C}$	32	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 msec, sine pulse	300	A
Thermal Resistance	$Z_{TH}$	$T_C = 25^\circ\text{C}$	0.85	$^\circ\text{C} / \text{W}$
Max. Junction Temperature	$T_J$	-	- 55 to + 150	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	- 55 to + 150	$^\circ\text{C}$

### Electrical Characteristics:

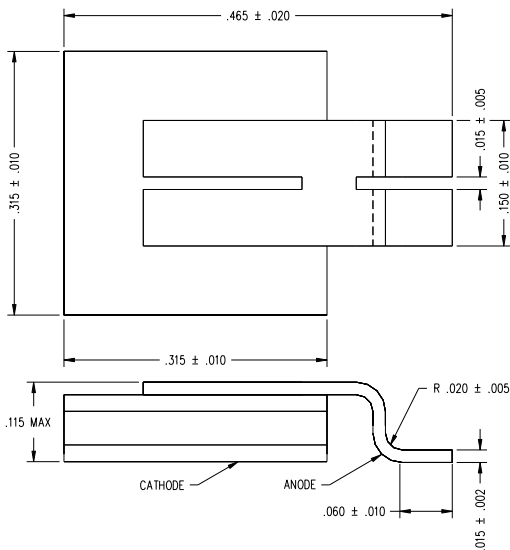
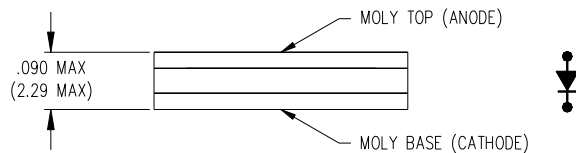
Characteristics	Symbol	Condition	Typ.	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 9A, Pulse, $T_J = 25^\circ\text{C}$	1.15	1.25	V
		@ 32A, Pulse, $T_J = 25^\circ\text{C}$	1.40	1.55	
	$V_{F2}$	@ 9A, Pulse, $T_J = 125^\circ\text{C}$	-	1.18	V
		@ 32A, Pulse, $T_J = 125^\circ\text{C}$	-	1.45	
Max. Reverse Current	$I_{R1}$	@ $V_R = 1200\text{V}$ , Pulse, $T_J = 25^\circ\text{C}$	2	50	$\mu\text{A}$
	$I_{R2}$	@ $V_R = 1200\text{V}$ , Pulse, $T_J = 125^\circ\text{C}$	-	500	$\mu\text{A}$
Reverse Recovery Time	$T_{RR}$	$I_F = 0.5\text{A}$ ; $I_{RM} = 1\text{A}$ , $I_{RR} = 0.25\text{A}$ $T_J = 25^\circ\text{C}$	0.3	0.5	$\mu\text{s}$
Capacitance	$C_J$	$V_R = 5\text{V}$ , $f = 1\text{MHz}$ , $V_{SIG} = 1\text{V}$	-	150	pF

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**MECHANICAL DIMENSIONS: In Inches / mm**



**SHD-2 High Profile**



**SHD-2B High Profile**

**PINOUT TABLE**

**SHD375589**  
**SHD375589B**

TYPE	PIN 1 (Base)	PIN 2
SINGLE RECTIFIER in a Surface Mount Package	CATHODE	ANODE

# **SENSITRON** **SEMICONDUCTOR**

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