

TECHNICAL DATA  
DATA SHEET 5282, REV. B.1

## ULTRAFAST RECOVERY RECTIFIER HIGH VOLTAGE

**Features:**

- Near Hermetic Construction
- Available as Reverse Polarity (R suffix)
- Low Forward Voltage Drop
- Ultrafast Reverse Recovery
- Low Power Loss, High Efficiency
- Very High Surge Capacity
- For ceramic seals use part number prefix SHDC
- Different Lead-bend options available
- JANTX (suffix S) and JANS (suffix SS) equivalent screening options

**Maximum Ratings:**

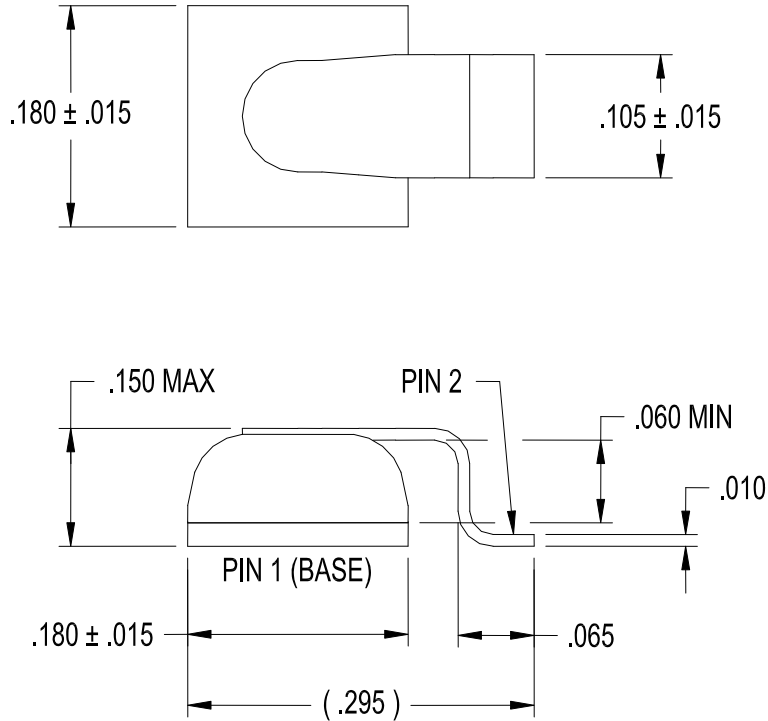
Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	$I_R = 100\mu A, T_C = 25^\circ C$	600	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form, $T_C = 85^\circ C$	25	A
Max. Peak One Cycle Non-Repetitive Surge Current	$I_{FSM}$	8.3 msec, sine pulse	150	A
Thermal Resistance	$R_{TH}$	-	1.5	$^\circ C / W$
Max. Junction Temperature	$T_J$	-	- 55 to + 150	$^\circ C$
Max. Storage Temperature	$T_{stg}$	-	- 55 to + 150	$^\circ C$

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Typ.	Max.	Units
Max. Forward Voltage Drop	$V_{F1}$	@ 5A, Pulse, $T_J = 25^\circ C$	1.10	1.25	V
		@ 10A, Pulse, $T_J = 25^\circ C$	1.16	1.30	
		@ 20A, Pulse, $T_J = 25^\circ C$	1.22	1.37	
	$V_{F2}$	@ 5A, Pulse, $T_J = 125^\circ C$	0.84	1.00	V
		@ 10A, Pulse, $T_J = 125^\circ C$	0.94	1.10	
		@ 20A, Pulse, $T_J = 125^\circ C$	1.07	1.23	
	$V_{F3}$	@ 5A, Pulse, $T_J = -55^\circ C$	1.18	1.35	V
		@ 10A, Pulse, $T_J = -55^\circ C$	1.23	1.40	
		@ 20A, Pulse, $T_J = -55^\circ C$	1.30	1.48	
Max. Reverse Current	$I_{R1}$	@ $V_R = 600V$ , Pulse, $T_J = 25^\circ C$	10	50	$\mu A$
	$I_{R2}$	@ $V_R = 480V$ , Pulse, $T_J = 125^\circ C$	4	15	mA
Reverse Recovery Time	$T_{RR}$	$I_F = 0.5A; I_{RM} = 1A, I_{RR} = 0.25A$ $T_J = 25^\circ C$	25	35	ns
Capacitance	$C_J$	$V_R = 10V, f = 1MHz$	60	80	pF

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**MECHANICAL DIMENSIONS: In Inches / mm**



**PKG: SNHD-1**

**PINOUT TABLE**

TYPE	PIN 1 (Base)	PIN 2
SNHD365423B	CATHODE	ANODE
SNHD365423BR	ANODE	CATHODE

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