

SENSITRON

SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 4967, REV. -

HERMETIC STANDARD RECOVERY RECTIFIER HIGH VOLTAGE

Features:

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- Very High Surge Capacity
- Very suitable for medium frequency applications (upto 3 kHz)
- Soft Reverse Recovery at Low and High Temperature
- T_{rr} guaranteed lower than 10 μ sec
- Electrically / Mechanically Stable during and after Packaging

Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	1100	V
Max. Average Forward Current	$I_{F(AV)}$	50% duty cycle, rectangular wave form, $T_C = 65^\circ\text{C}$	80	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 msec, sine pulse	720	A
Thermal Impedance	Z_{TH}	$T_C = 25^\circ\text{C}$	0.5	$^\circ\text{C} / \text{W}$
Max. Junction Temperature	T_J	-	- 40 to + 165	$^\circ\text{C}$
Max. Storage Temperature	T_{stg}	-	- 55 to + 175	$^\circ\text{C}$

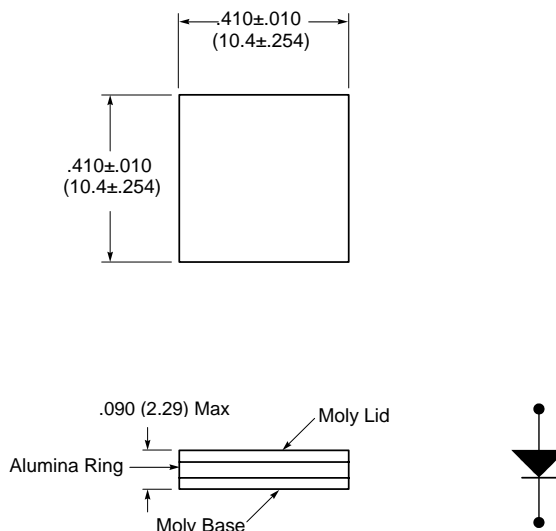
Electrical Characteristics:

Characteristics	Symbol	Condition	Typ.	Max.	Units
Max. Forward Voltage Drop	V_{F1}	@ 20A, Pulse, $T_J = 25^\circ\text{C}$	0.88	0.91	V
		@ 80A, Pulse, $T_J = 25^\circ\text{C}$	1.20	1.35	V
	V_{F2}	@ 20A, Pulse, $T_J = 110^\circ\text{C}$	-	0.82	V
		@ 80A, Pulse, $T_J = 110^\circ\text{C}$	-	1.22	V
Max. Reverse Current	I_{R1}	@ $V_R = 1000\text{V}$, Pulse, $T_J = 25^\circ\text{C}$	4	10	μA
		@ $V_R = 400\text{V}$, Pulse, $T_J = 25^\circ\text{C}$	1.5	2.5	μA
	I_{R2}	@ $V_R = 1000\text{V}$, Pulse, $T_J = 110^\circ\text{C}$	-	250	μA
		@ $V_R = 400\text{V}$, Pulse, $T_J = 110^\circ\text{C}$	-	50	μA
Reverse Recovery Time	t_{RR}	$I_F = 0.5\text{A}$; $I_R = 1.0\text{A}$, $I_{RM} = 0.25\text{A}$ $T_J = 25^\circ\text{C}$	4	10	μsec
Max. Junction Capacitance	C_T	@ $V_R = 0\text{V}$, $T_C = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $I_{SIG} = 100\text{mV (p-p)}$	200	-	pF

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MECHANICAL DIMENSIONS: In Inches / mm



SHD-3

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