

SENSITRON

SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 930, REV. C

ULTRA FAST RECOVERY SILICON RECTIFIER DIE

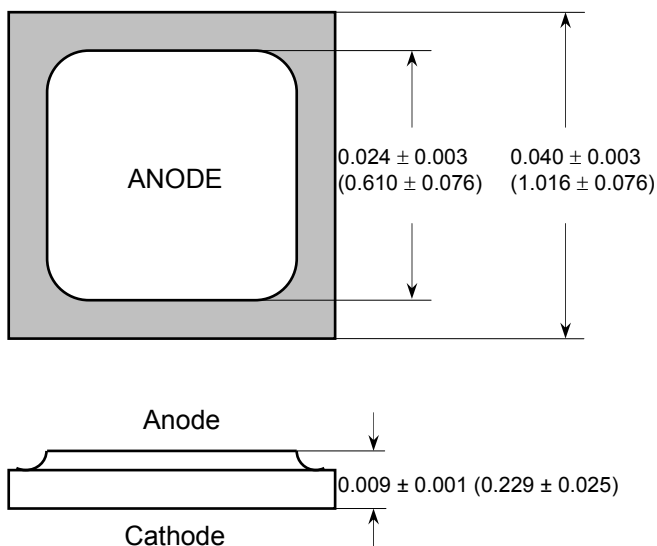
Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	V_{RWM}	-	150	V
DC Blocking Voltage	V_R			
Breakdown Voltage	V_{BR}			
Max. Average Forward Current	$I_{F(AV)}$	@ 55°C	1.0	A
Max. Peak One Cycle Non-Repetitive Surge Current	I_{FSM}	8.3 ms, sine pulse ⁽¹⁾	35	A
Die Size	-	-	40	mil
Max. Junction Temperature	T_J	-	-55 to +175	°C
Max. Storage Temperature	T_{stg}	-	-55 to +175	°C

Electrical Characteristics:

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop	V_{F1}	1A, pulse, $T_J = 25^\circ\text{C}$	0.875	V
	V_{F2}	2.5A, pulse, $T_J = 25^\circ\text{C}$	0.975	V
	V_{F3}	1A, pulse, $T_J = 100^\circ\text{C}$	0.800	V
Max. Reverse Current	I_{R1}	$V_R = V_{RWM}$, pulse, $T_J = 25^\circ\text{C}$	1.0	μA
	I_{R2}	$V_R = V_{RWM}$, pulse, $T_J = 100^\circ\text{C}$	50	μA
Reverse Recovery Time	t_{rr}	$I_F = I_R = 0.5\text{A}$, $I_{RM} = 0.05\text{A}$	25	ns
Max. Junction Capacitance	C_T	$V_R = 10\text{V}$, $T_C = 25^\circ\text{C}$ $f_{SIG} = 1\text{MHz}$, $V_{SIG} = 50\text{mV (p-p)}$	25	pF

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Mechanical Dimensions: In Inches (mm)


Bottom side metalization: Ti/Ni/Ag - 30 kÅ minimum.

Top side metalization: Al - 25 kÅ minimum

Bottom side is cathode, top side is anode.

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