

**TECHNICAL DATA**  
**DATA SHEET 931, REV.B**

## FAST RECOVERY SILICON RECTIFIER DIE

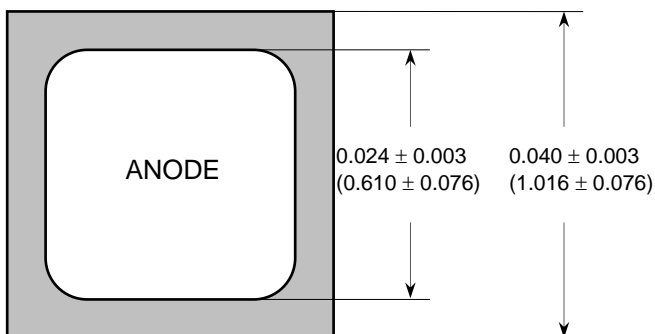
### Maximum Ratings:

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage 1C4942 1C4944 1C4946 1C4947	$V_{RWM}$	-	200 400 600 800	V
Max. Average Forward Current	$I_{F(AV)}$	@ 55°C	1.0	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	$V_{F1}$	@ 1.0A, Pulse, $T_J = 25^\circ\text{C}$ Duty cycle $\leq 2\%$ , pulse width $\leq 300\mu\text{s}$	1.3	V
Max. Reverse Current	$I_{R1}$	@ $V_R = 400\text{V}$ , Pulse, $T_J = 25^\circ\text{C}$	1.0	$\mu\text{A}$
	$I_{R2}$	@ $V_R = 400\text{V}$ , Pulse, $T_J = 100^\circ\text{C}$	200	$\mu\text{A}$
Reverse Recovery Time 1C4942 1C4944 1C4946 1C4947	$t_{rr}$	$I_f = 500\text{mA}$ , $I_r = 1\text{A}$ , $I_{rm} = 250\text{mA}$	150 150 250 250	ns

### Mechanical Dimensions: In Inches / mm

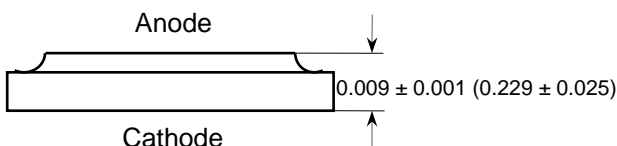


Bottom side metalization: Ti/NiAg - 30 kÅ minimum.

Top side metalization: Al - 25 kÅ minimum

Bottom side is cathode, top side is anode.

For cathode top, add -R



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