



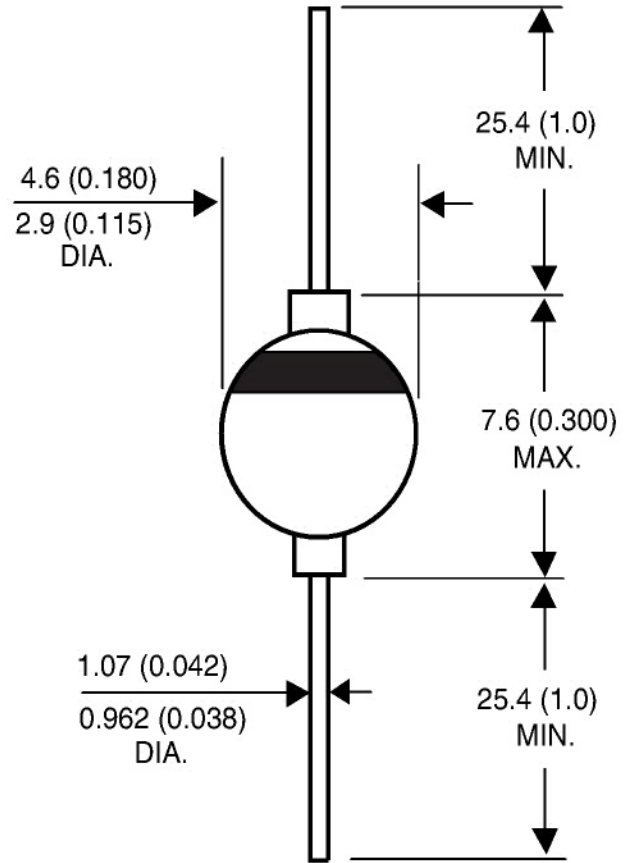
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Features

- High surge capability
- Microminiature package
- No thermal fatigue
- Metallurgically bonded
- Thermally matched system
- Zero solderability defects



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at 3/8" from the body, $T_L = 75^\circ\text{C}$	P_{tot}	5.0	Watts
Average Forward Rectified Current at $T_L = 75^\circ\text{C}$	I_{AV}	6.0	Amps
Junction & Storage Temperature Range	$T_{J\&S}$	-65 to +200	$^\circ\text{C}$
Maximum Non Repetitive Surge (8.3ms)	I_{FSM}	125	Amps
Thermal Resistance at 3/8" from the body, $T_L = 75^\circ\text{C}$	$R_{\theta JL}$	35	$^\circ\text{C/W}$

Characteristics at $T = 25^\circ\text{C}$

Type	Peak Inverse Voltage (MIN.) (PIV) Volts	Breakdown Voltage (MIN.) @ 100 μA (B_V) Volts	Maximum Average Rectified Current (I_O) @ 75 $^\circ\text{C}$ Amps	Maximum Forward Voltage Drop (V_F) @ 4A Volts	Maximum Reverse Leakage Current (I_R) @ PIV		Maximum Surge Current (I_{FSM}) Amps	Typical Junction Capacitance @ -10V (C_O) pF	Maximum Reverse Recovery (NOTE 1) (t_r) nS
					25 $^\circ\text{C}$ μA	75 $^\circ\text{C}$ μA			
1N5807 ✓	50	55	6.0	0.875	5	150	125	45	30
1N5808	75	80	6.0	0.875	5	150	125	45	30
1N5809 ✓	100	110	6.0	0.875	5	150	125	45	30
1N5810	125	135	6.0	0.875	5	150	125	45	30
1N5811 ✓	150	160	6.0	0.875	5	150	125	45	30

Note 1: $I_F = I_R = 1.0\text{A}$, t_{rr} @ 0.1A