

**1N5059 THRU 1N5062**  
**MINIATURE GLASS PASSIVATED SILICON RECTIFIER**  
*Voltage - 200 to 800 Volts Current - 1.0 Ampere*

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

	SYMBOLS	1N5059	1N5060	1N5061	1N5062	UNITS
*Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	Volts
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	Volts
*Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	Volts
*Maximum Average Forward Rectified Current .375", (9.5mm) Lead Lengths at $T_A = 75^\circ C$	$I_{AV}$	1.0				Amps
*Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50.0				Amps
*Maximum Instantaneous Forward Voltage at 1.0A	$V_F$	1.2				Volts
*Maximum Full Load Reverse Current, Full Cycle Average .375", (9.5mm) $T_A = 25^\circ C$ Lead Lengths at $T_A = 75^\circ C$	$I_{R(AV)}$	150		100		$\mu A$
*Maximum DC Reverse Current $T_A = 25^\circ C$ at Rated DC Blocking Voltage $T_A = 175^\circ C$	$I_R$	300		200		$\mu A$
Typical Reverse Recovery Time (Note 1)	$T_{RR}$	2.0				$\mu s$
Typical Junction Capacitance (Note 2)	$C_J$	15.0				pf
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	40.0				$^\circ C/W$
*Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +175				$^\circ C$

**NOTES:**

- Reverse Recovery Test Conditions :  $I_F = 0.5A, I_R = 1.0A, I_{rr} = .25A$
- Measured at 1 MHz and applied reverse voltage of 4.0 volts.
- Thermal Resistance from Junction to Ambient at .375" (9.5mm) Lead Lengths, P.C. Board Mounted.  
 \*JEDEC Registered Values

