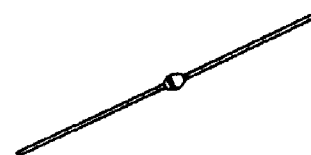


Passivated Rectifier

TRANSIENT VOLTAGE PROTECTED
2.5 Amps 200-1000 Volts

1N5059
1N5060
1N5061
1N5062
A14P

The A14 is "Transient-Voltage Protected." This device will dissipate up to 1000 watts in the reverse direction without damage. Voltage Transients generated by household or industrial power lines are dissipated.



absolute maximum ratings: (25°C unless otherwise specified)

	1N5059 (A14B)	1N5060 (A14D)	1N5061 (A14M)	1N5062 (A14N)	A14P	
*Reverse Voltage (-65°C to $+175^{\circ}\text{C}$, T_J) (-65°C to $+165^{\circ}\text{C}$ for 1N5062 and A14P)						
Working Peak, V_{RWM}	200	400	600	800	1000	Volts
DC, V_R	200	400	600	800	1000	Volts
*Average Forward Current, I_o						
*100°C Ambient (90°C for 1N5062 and A14P)	←	←	1.0	←	←	Amp
25°C Ambient (See Rating Curves)	←	←	2.5	←	←	Amp
*Peak Surge Forward Current, I_{FSM}						
Non-repetitive, .0083 sec., half sine wave, Full Load JEDEC Method	←	←	50	←	←	Amps
No Load (25°C Case)	←	←	65	←	←	Amps
Peak Surge Forward Current, I_{FSM}						
Non-repetitive, .001 sec., half sine wave, Full Load	←	←	90	←	←	Amps
No Load (25°C Case)	←	←	100	←	←	Amps
*Junction Operating and Storage Temperature Range, T_J & T_{STG}	← -65 to +175	← -65 to +175	← -65 to +175	← -65 to +165	← -65 to +165	°C
I^2t , RMS (for fusing), .001 to .01 sec.	←	←	4.0	←	←	Amps ² sec.
Maximum Avalanche Voltage	←	←	1600	←	←	Volts
Peak Non-repetitive Reverse Power Rating, P_{RM}						
20 $\mu\text{sec.}$, half sine wave, at Max. T_J	←	←	1000	←	←	Watts
*100 $\mu\text{sec.}$, JEDEC	←	←	450	←	←	Watts
*Mounting: Any position. Lead Temperature 290°C maximum to 1/8 inch from body for 5 seconds maximum during mounting.						

electrical characteristics: (25°C unless otherwise specified)

*Maximum Forward Voltage Drop, V_F , 1A, $T_J = 75^{\circ}\text{C}$	←	1.2	→	Volts	
Maximum Reverse Current, I_R , at Rated V_{RRM} :					
$T_J = 25^{\circ}\text{C}$	←	5.0	→	μA	
* $T_J = 165^{\circ}\text{C}$	—	200	200	μA	
* $T_J = 175^{\circ}\text{C}$	300	300	200	μA	
Typical Reverse Current, I_R , at Rated V_{RRM}	←	1.0	→	μA	
Typical Reverse Current, I_{II}					
$T_J = 25^{\circ}\text{C}$	0.2	0.2	0.3	0.5	μA
$T_J = 100^{\circ}\text{C}$	20	20	20	30	μA
Typical Reverse Recovery Time, T_{RR}	←	3	→	$\mu\text{sec.}$	
Maximum Reverse Recovery Time, T_{RR}	←	6	→	$\mu\text{sec.}$	

