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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°C, T_J) (−65°C to +165°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 +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 μsec., half sine wave, at Max. T_J	←		1000		→	Watts
*100 μsec., JEDEC	←		450		→	Watts

*Mounting: Any position. Lead Temperature 290°C maximum to ⅛ 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°C	←		1.2		→	Volts
Maximum Reverse Current, I_R, at Rated V_{RRM}:						
T_J = 25°C	←		5.0		→	μA
*T_J = 165°C	—	—	—	200	200	μA
*T_J = 175°C	300	300	200	—	—	μA
Typical Reverse Current, I_R, at Rated V_{RRM}	←		1.0		→	μA
Typical Reverse Current, I_R						
T_J = 25°C	0.2	0.2	0.3	0.5	0.5	μA
T_J = 100°C	20	20	20	30	30	μA
Typical Reverse Recovery Time, T_{RR}	←		3		→	μsec.
Maximum Reverse Recovery Time, T_{RR}	←		6		→	μsec.