

*New Jersey Semi-Conductor Products, Inc.*

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IN4245
IN4246
IN4247
IN4248
IN4249

THE 1N4245-49 SERIES ARE 2.5 AMPERE RATED, AXIAL-LEADED, GENERAL PURPOSE RECTIFIERS. DUAL HEAT-SINK CONSTRUCTION PROVIDES RIGID MECHANICAL SUPPORT FOR THE PELLET AND EXCELLENT THERMAL CHARACTERISTICS. PASSIVATION AND PROTECTION OF THE SILICON PELLETS PN JUNCTION ARE PROVIDED BY SOLID GLASS; NO ORGANIC MATERIALS ARE PRESENT WITHIN THE HERMETICALLY-SEALED PACKAGE.

The 1N4245-49 series are "Transient-Voltage Protected." These devices 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)

	1N4245	1N4246	1N4247	1N4248	1N4249	
*Reverse Voltage (-65 to +160°C, T <sub>J</sub> )						
Working Peak, V <sub>RWM</sub>	200	400	600	800	1000	Volts
DC, V <sub>R</sub>	200	400	600	800	1000	Volts
*Average Forward Current, I <sub>o</sub>						
55°C ambient (see rating curves)	←----- 1.0 -----→					Amp
25°C " "	←----- 2.5 -----→					Amp
*Peak Surge Forward Current, I <sub>FSM</sub>						
Non-repetitive, .0083 sec						
Half sine wave	←----- 25 -----→					Amps
Full load JEDEC method						
Peak Surge Forward Current, I <sub>FSM</sub>						
Non-repetitive, .001 sec						
Half sine wave						
Full load 160°C, T <sub>J</sub>	←----- 90 -----→					Amps
No Load (25°C Case)	←----- 100 -----→					Amps
*Junction Operating Temperature Range, T <sub>J</sub>	←----- -65°C to +160°C -----→					
*Storage Temperature Range, T <sub>STG</sub>	←----- -65°C to +200°C -----→					
I <sup>2</sup> t, RMS for fusing, .001 to .01 sec.	←----- 4.0 -----→					Amps <sup>2</sup> sec.
Peak Non-Repetitive Reverse Power Rating, P <sub>RM</sub>	←----- 1000 -----→					Watts
(20 μsec. half sine wave, at Max. T <sub>J</sub> )						
Mounting: Any position. Lead temperature 290°C maximum to 1/8" from body for 5 seconds maximum during mounting.						

electrical characteristics: (25°C unless otherwise specified)

* Maximum Forward Voltage Drop, V <sub>FM</sub>	←----- 1.2 -----→	Volts
I <sub>F</sub> = 1.0A, T <sub>A</sub> = +55°C		
* Maximum Reverse Current, I <sub>RM</sub>		
at rated V <sub>R</sub>		
T <sub>J</sub> = +25°C	←----- 1.0 -----→	μA
T <sub>J</sub> = +125°C	←----- 25 -----→	μA
Typical Reverse Recovery Time, t <sub>rr</sub>	←----- 2.5 -----→	μsec
Maximum Reverse Recovery Time, t <sub>rr</sub>	←----- 5.0 -----→	μsec

\*JEDEC Registered data.