

Passivated Rectifier

TRANSIENT VOLTAGE PROTECTED
2.5 Amps 200-1000 Volts

1N4245

1N4246

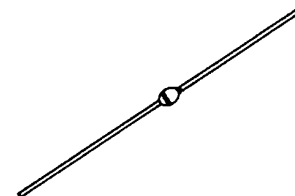
1N4247

1N4248

1N4249

THE GENERAL ELECTRIC 1N4245-49 SERIES ARE A14 TYPES, 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 (A14's) 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_J)						
Working Peak, V_{RWM}	200	400	600	800	1000	Volts
DC, V_R	200	400	600	800	1000	Volts
*Average Forward Current, I_O						
55°C ambient (see rating curves)	← 1.0 →					Amp
25°C " "	← 2.5 →					Amp
*Peak Surge Forward Current, I_{FSM}						
Non-repetitive, .0083 sec	← 25 →					Amps
Half sine wave						
Full load JEDEC method						
Peak Surge Forward Current, I_{FSM}						
Non-repetitive, .001 sec	← 90 →					Amps
Half sine wave	← 100 →					Amps
Full load 160°C, T_J	← −65°C to +160°C →					
No Load (25°C Case)	← −65°C to +200°C →					
*Junction Operating Temperature Range, T_J	← 4.0 →					Amps² sec.
*Storage Temperature Range, T_{STG}	← 1000 →					Watts
I^2t , RMS for fusing, .001 to .01 sec.						
Peak Non-Repetitive Reverse						
Power Rating, P_{RM}						
(20 μ sec. half sine wave, at Max. T_J)						
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_{FM}	← 1.2 →	Volts
$I_F = 1.0A$, $T_A = +55^\circ C$		
* Maximum Reverse Current, I_{RM}	← 1.0 →	μA
at rated V_R	← 25 →	μA
$T_J = +25^\circ C$	← 2.5 →	μsec
$T_J = +125^\circ C$	← 5.0 →	μsec
Typical Reverse Recovery Time, t_{rr}		
Maximum Reverse Recovery Time, t_{rr}		
(Recovery Circuit Per MIL-S-19500/286B)		
*JEDEC Registered data.		

1N4245-1

MAXIMUM ALLOWABLE DC OUTPUT CURRENT RATINGS

SINGLE PHASE
600 VOLTS & BELOW

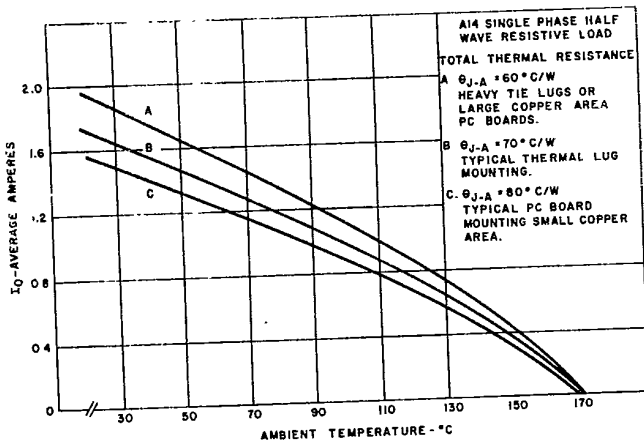
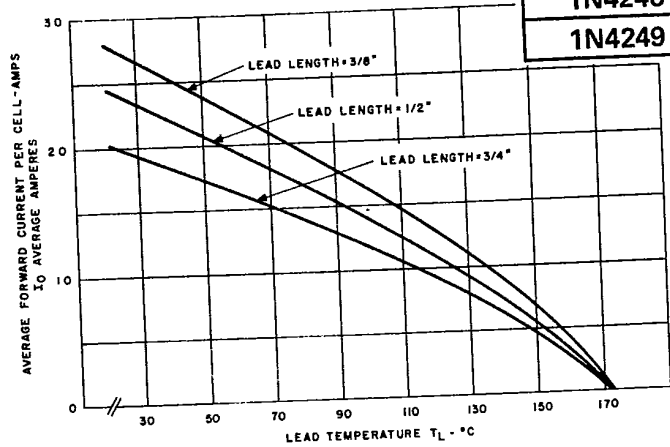
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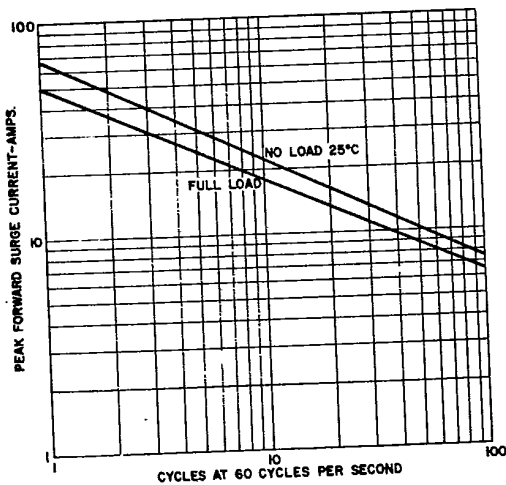
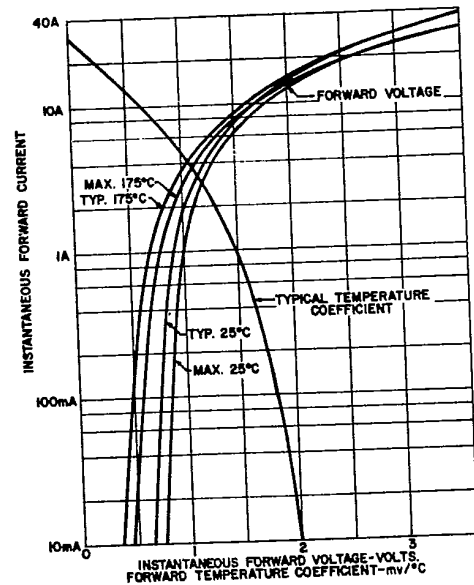
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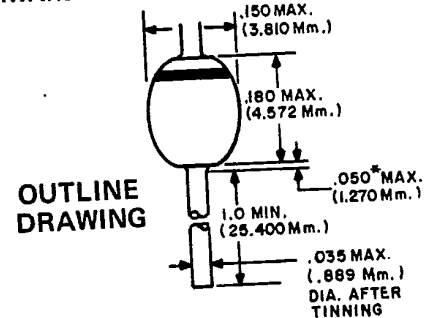
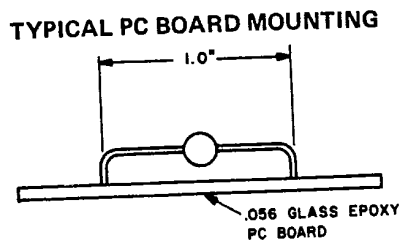
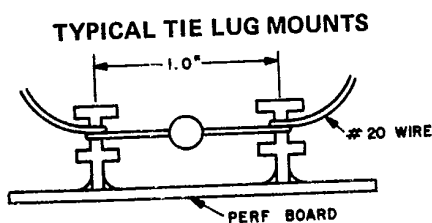
AMBIENT OPERATION
(See Typical Mounting Below)

TIE POINT OPERATION

TYPICAL CHARACTERISTICS

MAXIMUM NON-REPETITIVE MULTICYCLE
FORWARD SURGE CURRENT

FORWARD CHARACTERISTICS

ALL DIMENSIONS ARE IN INCHES
AND (METRIC)
*WELD AND SOLDER FLASH NOT
CONTROLLED IN THIS AREA1N4245-2
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