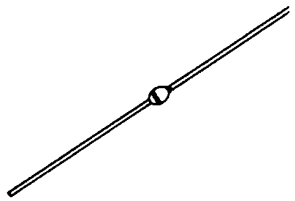
1N4305 SEE PAGE 229

Passivated Rectifier

TRANSIENT VOLTAGE PROTECTED
2.5 Amps 200-1000 Volts

IN4245
IN4246
IN4247
IN4248
IN4249

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						
Half sine wave	← 25 →					Amps
Full load JEDEC method						
Peak Surge Forward Current, I_{FSM}						
Non-repetitive, .001 sec						
Half sine wave						
Full load 160°C, T_J	← 90 →					Amps
No Load (25°C Case)	← 100 →					Amps
*Junction Operating Temperature Range, T_J	← −65°C to +160°C →					
*Storage Temperature Range, T_{STG}	← −65°C to +200°C →					
I^2t, RMS for fusing, .001 to .01 sec.	← 4.0 →					$Amps^2$ sec.
Peak Non-Repetitive Reverse Power Rating, P_{RM} (20 μsec. half sine wave, at Max. T_J)	← 1000 →					Watts

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} $I_F = 1.0A$, $T_A = +55°C$	← 1.2 →	Volts
* Maximum Reverse Current, I_{RM} at rated V_R		
$T_J = +25°C$	← 1.0 →	μA
$T_J = +125°C$	← 25 →	μA
Typical Reverse Recovery Time, t_{rr}	← 2.5 →	μsec
Maximum Reverse Recovery Time, t_{rr} (Recovery Circuit Per MIL-S-19500/286B)	← 5.0 →	μsec

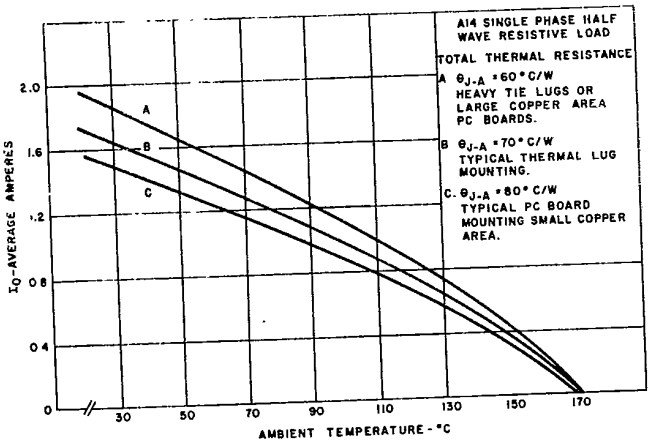
*JEDEC Registered data.

1N4245-1

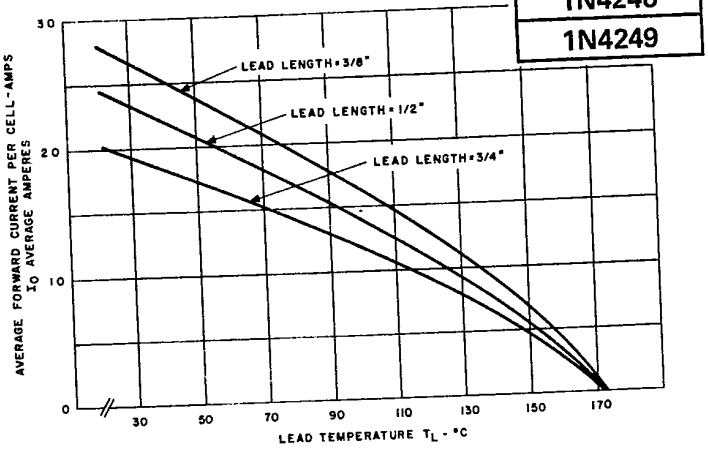
MAXIMUM ALLOWABLE DC OUTPUT CURRENT RATINGS

1N4245
1N4246
1N4247
1N4248
1N4249

SINGLE PHASE
600 VOLTS & BELOW

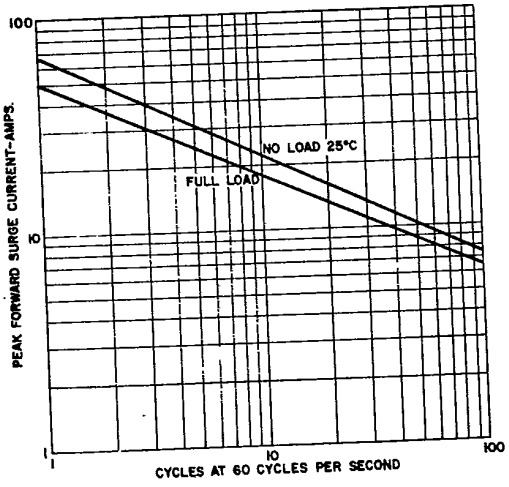


AMBIENT OPERATION
(See Typical Mounting Below)

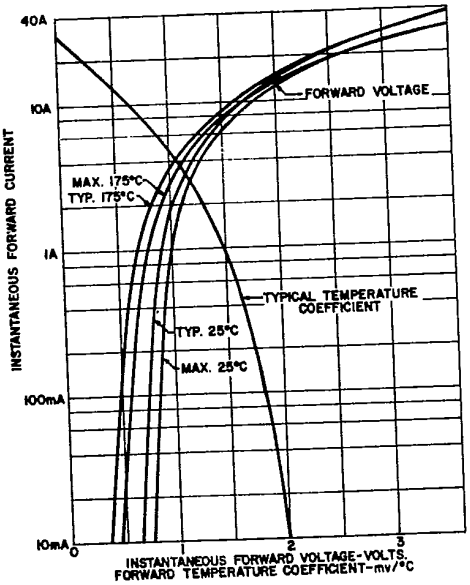


TIE POINT OPERATION

TYPICAL CHARACTERISTICS

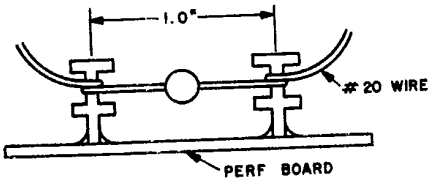


MAXIMUM NON-REPETITIVE MULTICYCLE FORWARD SURGE CURRENT

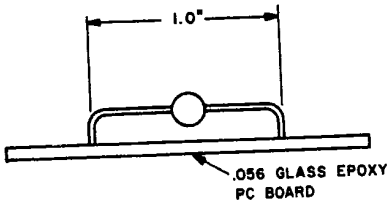


FORWARD CHARACTERISTICS

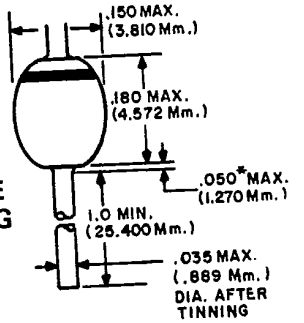
TYPICAL TIE LUG MOUNTS



TYPICAL PC BOARD MOUNTING



OUTLINE DRAWING



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

1N4245-2