

# DIGITRON SEMICONDUCTORS

1N4245 – 1N4249

RECTIFIERS

## MAXIMUM RATINGS

Operating Temperature	-65° to +175°C
Storage Temperature	-65° to +200°C
Power Dissipation	1 Amp/ no heat sink @ +55°C

## ELECTRICAL CHARACTERISTICS

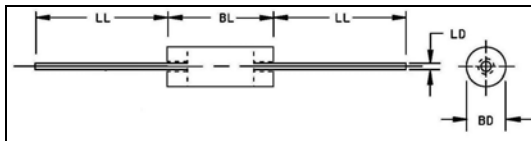
Type	Peak Inverse Voltage (Min.) PIV	Breakdown Voltage (Min.) B <sub>V</sub> @ 100µA	Average Rectified Current I <sub>o</sub>		Forward Voltage (Max.) V <sub>F</sub> @ 3A	Reverse Current (Max.) I <sub>R</sub> @ PIV		Surge Current (Max.) Note 1 I <sub>F(surge)</sub>	Reverse Recovery (Max.) Note 2 t <sub>rr</sub>
	Volts	Volts	Amps		Volts	µA		Amps	µsec
			100°C	150°C		25°C	150°C		
1N4245	200	240	1.00	.333	1.3	1.0	150	25	5.0
1N4246	400	480	1.00	.333	1.3	1.0	150	25	5.0
1N4247	600	720	1.00	.333	1.3	1.0	150	25	5.0
1N4248	800	960	1.00	.333	1.3	1.0	150	25	5.0
1N4249	1000	1150	1.00	.333	1.3	1.0	150	25	5.0

Note 1: T<sub>A</sub> = 100°, f = 60 Hz, I<sub>o</sub> = 1A, 10-8msec, surges @ 1/minute

Note 2: I<sub>F</sub> = 0.5A, I<sub>Rm</sub> = 1A, I<sub>R(REC)</sub> = .250A

## MECHANICAL CHARACTERISTICS

<b>Case:</b>	Hermetically sealed glass
<b>Polarity:</b>	Cathode Band
<b>Marking:</b>	Body-Painted, Alpha-Numeric



	Dimensions			
	1N4245 – 1N4249			
	Inches		Millimeters	
	Min	Max	Min	Max
<b>BD</b>	0.065	0.110	1.650	2.790
<b>BL</b>	0.125	0.205	3.300	
<b>LD</b>	0.027	0.032	0.660	0.840
<b>LL</b>	0.700	1.300	25.400	38.100

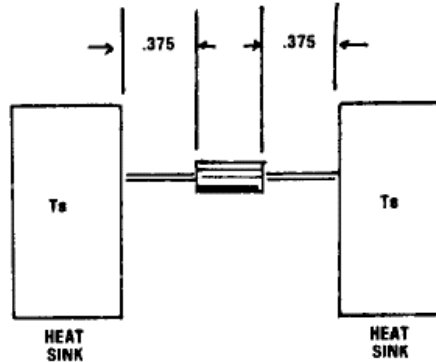
Available Non-RoHS (standard) or RoHS compliant (add PBF suffix).

Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.

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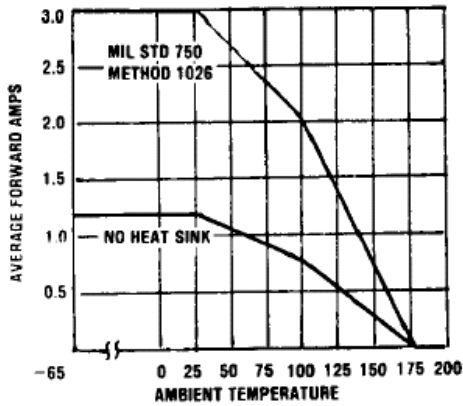
RECTIFIERS



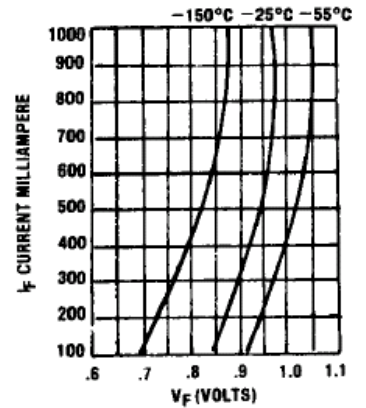
Thermal Resistance From Junction To Heat Sink  $\theta_{js}$  = 30°C/W Max.

$$P_{max} = \frac{T_J - T_s}{\theta_{js}}$$

$P_{max}$  = Max. Continuous Dissipation, Watts  
 $T_J$  = Max. Junction Temp. = 175°C  
 $T_s$  = Heat Sink Temp.



MAXIMUM FORWARD CURRENT VS AMBIENT TEMPERATURE



TYPICAL FORWARD CONDUCTANCE CURVE