

Microsemi Corp.
The diode experts



**1N4245 thru
1N4249**

SANTA ANA, CA

For more information call:
(714) 979-8220

FEATURES

- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- STANDARD RECOVERY
- PIV TO 1000 VOLTS
- JAN/TX/TXV TYPES AVAILABLE PER MIL-S-19500/286

MAXIMUM RATINGS

Operating Temperature: -65°C to +175°C

Storage Temperature: -65°C to +200°C

Power Dissipation: (A) 3 Amp/MIL-STD-750 (See Figure 2)

(B) 1 Amp/no heat sink @ +55°C

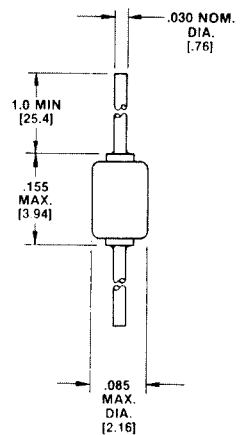
ELECTRICAL CHARACTERISTICS

TYPE	PEAK INVERSE VOLTAGE (MIN.) PIV	BREAKDOWN VOLTAGE (MIN.) $B_V @ 100 \mu A$	AVERAGE RECTIFIED CURRENT I_O		FORWARD VOLTAGE (MAX.) $V_F @ 3 A$	REVERSE CURRENT (MAX.) $I_R @ PIV$		SURGE CURRENT (MAX.) (NOTE 1) $I_F(\text{surge})$	REVERSE RECOVERY (MAX.) (NOTE 2) t_{rr}
			AMPS			μA			
			VOLTS	VOLTS		VOLTS	AMPS		
			100°C	150°C		25°C	150°C		
JAN 1N4245	200	240	1.00	.333	1.3	1.0	150	25	5.0
JAN 1N4246	400	480	1.00	.333	1.3	1.0	150	25	5.0
JAN 1N4247	600	720	1.00	.333	1.3	1.0	150	25	5.0
JAN 1N4248	800	960	1.00	.333	1.3	1.0	150	25	5.0
JAN 1N4249	1000	1150	1.00	.333	1.3	1.0	150	25	5.0

NOTE 1: $T_A = 100^\circ C$, $f = 60 \text{ Hz}$, $I_O = 1 A$, 10-8 m sec. surges @ 1/minute.

NOTE 2: $I_F = 0.5 A$, $I_{Rm} = 1 A$, $I_{R(REC)} = .250 A$

MILITARY RECTIFIERS



**FIGURE 1
PACKAGE A**

MECHANICAL CHARACTERISTICS

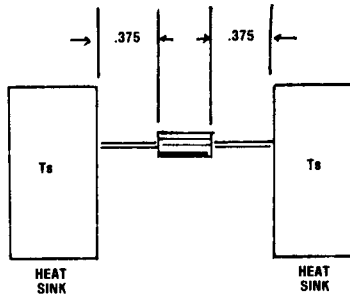
CASE: Hermetically sealed glass case.

LEAD MATERIAL: Tinned copper.

MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

1N4245 thru 1N4249



Thermal Resistance From Junction To Heat Sink θ_{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.

FIGURE 2
MIL STD 750 METHOD 1026(A)

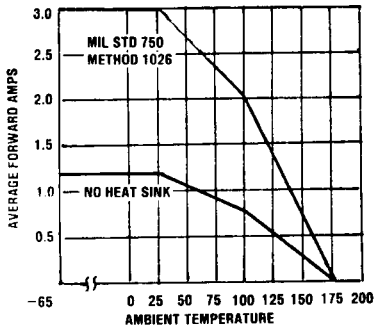


FIGURE 3
MAXIMUM FORWARD CURRENT
VS AMBIENT TEMPERATURE

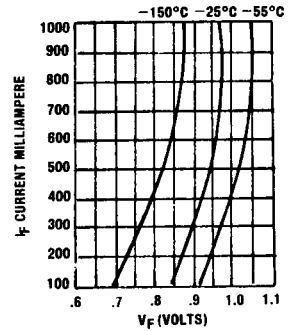


FIGURE 4
TYPICAL FORWARD
CONDUCTANCE CURVE