Microsemi Corp.
The diode experts

SANTA ANA, CA
For more information call:
(714) 979-8220

ALSO AVAILABLE IN SURFACE MOUNT

1N4942 thru 1N4948

MILITARY RECTIFIERS

FEATURES

- MICROMINIATURE PACKAGE
- VOIDLESS HERMETICALLY SEALED GLASS PACKAGE
- TRIPLE LAYER PASSIVATION
- METALLURGICALLY BONDED
- FAST RECOVERY
- PIV TO 1000 VOLTS
- JAN/TX/TXV TYPES AVAILABLE PER MIL-S-19500/359

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 (MAX.) PIV	BREAKDOWN VOLTAGE (MIN.) B_V @ 50μA	AVERAGE RECTIFIED CURRENT I_o		FORWARD VOLTAGE (MAX.) V_F @ 1 A	REVERSE CURRENT (MAX.) I_R @ PIV		CAPACITANCE (MAX.) Co @ -12V	SURGE CURRENT (MAX.) (NOTE 1) I_F(surge)	REVERSE RECOVERY (MAX.) (NOTE 2) t_{rr}
	VOLTS	VOLTS	AMPS		VOLTS	μA		pF	AMPS	n sec.
			55°C	100°C		25°C	150°C			
JAN 1N4942	200	220	1.0	.750	1.3	1.0	200	45	15	150
JAN 1N4944	400	440	1.0	.750	1.3	1.0	200	35	15	150
JAN 1N4946	600	660	1.0	.750	1.3	1.0	200	25	15	250
JAN 1N4947	800	880	1.0	.750	1.3	1.0	200	25	15	250
JAN 1N4948	1000	1100	1.0	.750	1.3	1.0	200	15	15	500

NOTE 1: T_A = 100°C, f = 60 Hz, I_o = 750mA, 10-8 m sec. surges @ 1/minute.
NOTE 2: I_F = 0.5A, I_{Rm} = 1A, $i_{R(REC)}$ = .250A

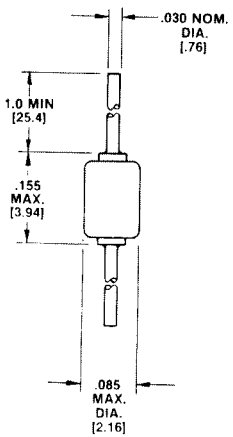

FIGURE 1
PACKAGE A

MECHANICAL CHARACTERISTICS

CASE: Hermetically sealed glass case.

LEAD MATERIAL: Tinned copper.

MARKING: Body painted, alpha numeric.

POLARITY: Cathode band.

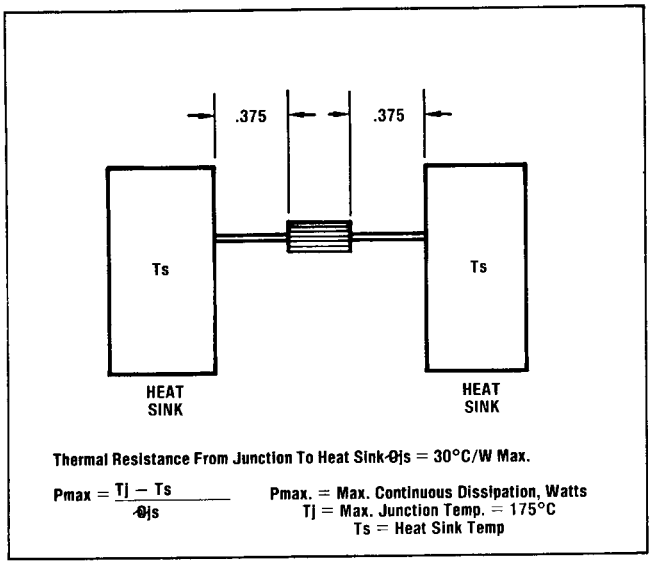

FIGURE 2
MIL STD 750 METHOD 1026 (A)

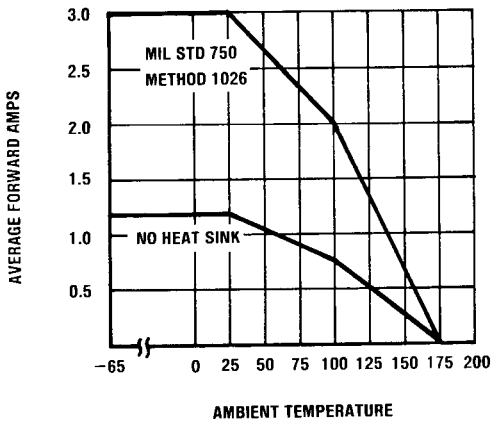

FIGURE 3
MAXIMUM FORWARD CURRENT
vs AMBIENT TEMPERATURE