

Microsemi Corp.

The diode experts

**ALSO
AVAILABLE IN
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MOUNT**

SANTA ANA, CA

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(714) 979-8220

**1N4942 thru
1N4948**

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

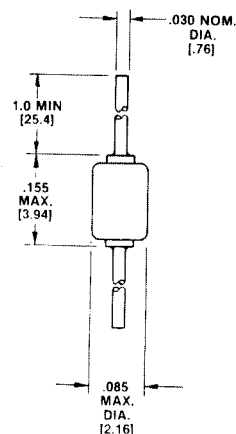
ELECTRICAL CHARACTERISTICS

TYPE	PEAK INVERSE VOLTAGE (MAX.) PIV	BREAKDOWN VOLTAGE (MIN.) B _V @ 50 μ A	AVERAGE RECTIFIED CURRENT I _O		FORWARD VOLTAGE (MAX.) V _F @ 1 A	REVERSE CURRENT (MAX.) I _R @ PIV		CAPACITANCE (MAX.) C _o @ -12V	SURGE CURRENT (MAX.) (NOTE 1) I _F (surge)	REVERSE RECOVERY (MAX.) (NOTE 2) t _{rr}
			AMPS			μ A				
	VOLTS	VOLTS	55°C	100°C	VOLTS	25°C	150°C	pF	AMPS	n sec.
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: $T_A = 100^\circ\text{C}$, $f = 60$ Hz, $I_o = 750\text{mA}$, 10-8 m sec. surges @ 1/minute.

NOTE 2: $I_F = 0.5\text{A}$, $I_{RM} = 1\text{A}$, $i_{R(REC)} = .250\text{A}$

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.

1N4942 thru 1N4948

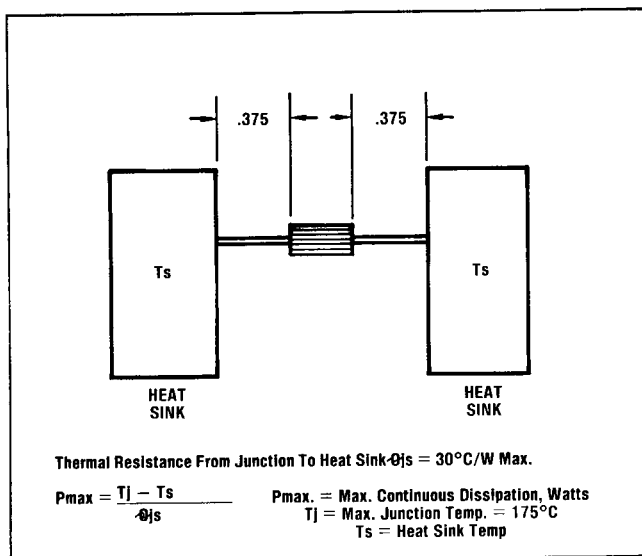


FIGURE 2
MIL STD 750 METHOD 1026 (A)

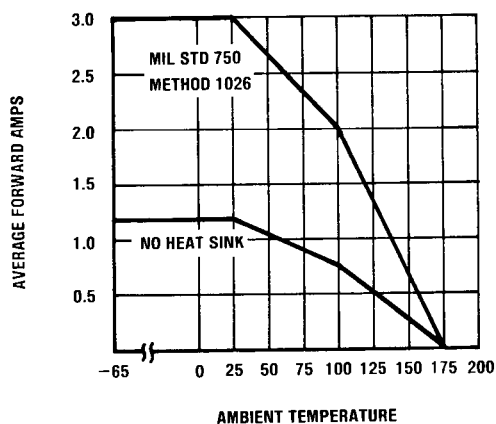


FIGURE 3
MAXIMUM FORWARD CURRENT
vs AMBIENT TEMPERATURE