

DIGITRON SEMICONDUCTORS

1N4942-1N4948

FAST RECOVERY RECTIFIERS

MAXIMUM RATINGS

Operating temperature	-65 to +175°C
Storage temperature	-65 to +200°C
Power dissipation	1 amp/no heat sink @ 55°C 3 amp/MIL-STD-750 (see figure 2)

ELECTRICAL CHARACTERISTICS

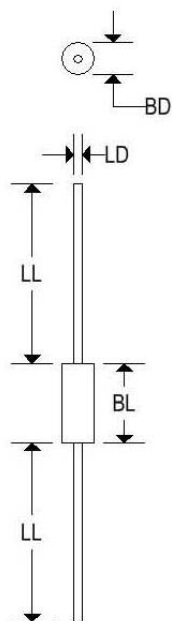
Part number	Peak inverse voltage (max.) PIV	Breakdown voltage (min) $B_V @ 50\mu A$	Average rectified current I_O		Forward voltage (max) $V_F @ 1A$	Reverse current (max) $I_R @ PIV$	Capacitance (max) $C_O @ -12V$	Surge current (max) $I_{F(surge)}^{(1)}$	Reverse recovery (max) $t_{rr}^{(2)}$	
	Volts	Volts	Amps		Volts	μA		pF	Amps	n sec.
			55°C	100°C		25°C	150°C			
1N4942	200	220	1.0	.750	1.3	1.0	200	45	15	150
1N4944	400	440	1.0	.750	1.3	1.0	200	35	15	150
1N4946	600	660	1.0	.750	1.3	1.0	200	25	15	250
1N4947	800	880	1.0	.750	1.3	1.0	200	25	15	250
1N4948	1000	1100	1.0	.750	1.3	1.0	200	15	15	500

Note 1: $T_A = 100^\circ C$, $f = 60Hz$, $I_O = 750mA$, 10-8 msec. surges @ 1/minute.

Note 2: $I_F = 0.5A$, $I_{RM} = 1A$, $I_{R(REC)} = 0.25A$

MECHANICAL CHARACTERISTICS

Case	Digi A
Marking	Body painted, alpha-numeric
Polarity	Cathode band



	Digi A			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	-	0.095	-	2.413
BL	-	0.180	-	4.572
LD	0.028	0.032	0.711	0.813
LL	0.700	-	17.800	-

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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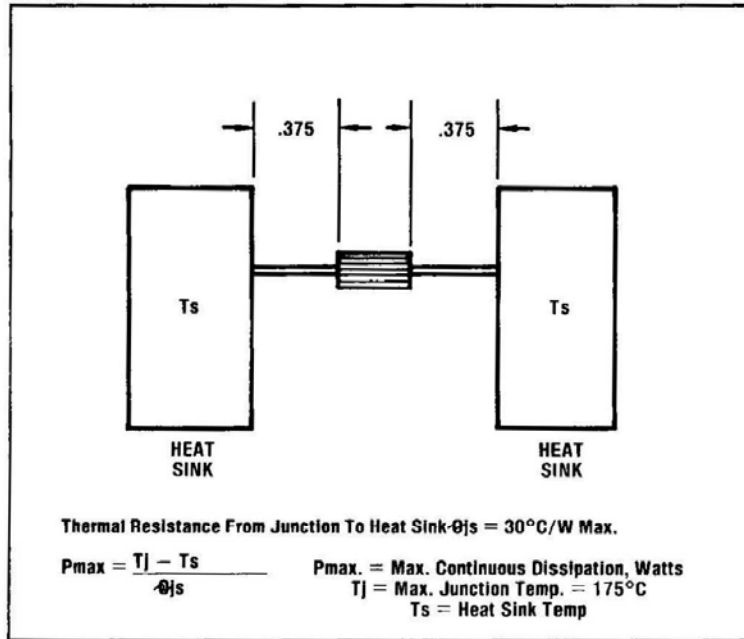


FIGURE 2
MIL STD 750 METHOD 1026 (A)

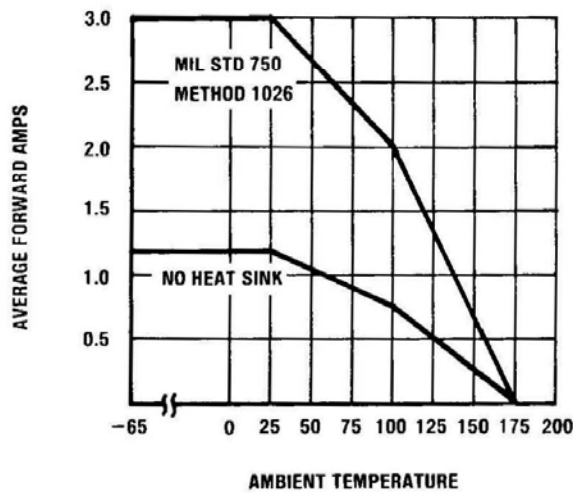


FIGURE 3
MAXIMUM FORWARD CURRENT
vs AMBIENT TEMPERATURE