

**1N941
 thru
 1N946B**

FEATURES

- ZENER VOLTAGE 11.7 V
- 1N941B, 943B, 944B, 945B HAVE JAN, JANTX, JANTXV, AND -1 QUALIFICATIONS TO MIL-S-19500/157
- S1N944B
- RADIATION HARDENED DEVICES AVAILABLE (SEE NOTE 4)

MAXIMUM RATINGS

Operating Temperature: -65°C to $+175^{\circ}\text{C}$.
 Storage Temperature: -65°C to $+175^{\circ}\text{C}$.
 DC Power Dissipation: 500 mW @ 25°C ambient.
 Power Derating: 3.33 mW/ $^{\circ}\text{C}$ above 25°C .

*** ELECTRICAL CHARACTERISTICS**

@ 25°C , unless otherwise specified

JEDEC TYPE NUMBERS	ZENER VOLTAGE V_z @ I_{zT} + (NOTE 3)	ZENER TEST CURRENT I_{zT}	MAXIMUM ZENER IMPEDANCE (NOTE 1) Z_{zT}	VOLTAGE TEMPERATURE STABILITY (NOTE 2 & 3) ΔV_z MAXIMUM	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT α_{Vz}
	VOLTS	mA	OHMS	mV	$^{\circ}\text{C}$	%/ $^{\circ}\text{C}$
1N941	11.12-12.28	7.5	30	88	0 to +75	.01
1N941A	11.12-12.28	7.5	30	181	-55 to +100	.01
1N941B	11.12-12.28	7.5	30	239	-55 to +150	.01
1N942	11.12-12.28	7.5	30	44	0 to +75	.005
1N942A	11.12-12.28	7.5	30	90	-55 to +100	.005
1N942B	11.12-12.28	7.5	30	120	-55 to +150	.005
1N943	11.12-12.28	7.5	30	18	0 to +75	.002
1N943A	11.12-12.28	7.5	30	36	-55 to +100	.002
1N943B	11.12-12.28	7.5	30	47	-55 to +150	.002
1N944	11.12-12.28	7.5	30	9	0 to +75	.001
1N944A	11.12-12.28	7.5	30	18	-55 to +100	.001
1N944B	11.12-12.28	7.5	30	24	-55 to +150	.001
1N945	11.12-12.28	7.5	30	4	0 to +75	.0005
1N945A	11.12-12.28	7.5	30	9	-55 to +100	.0005
1N945B	11.12-12.28	7.5	30	12	-55 to +150	.0005
1N946	11.12-12.28	7.5	30	1.8	0 to +75	.0002
1N946A	11.12-12.28	7.5	30	3.6	-55 to +100	.0002
1N946B	11.12-12.28	7.5	30	4.7	-55 to +150	.0002

*JEDEC Registered Data

NOTE 1 Measured by superimposing 0.75 mA ac rms on 7.5 mA DC @ 25°C .

NOTE 2 The maximum allowable change observed over the entire temperature range i.e., the diode voltage will not exceed the specified mV change at any discrete temperature between the established limits.

NOTE 3 Voltage measurements to be performed 15 seconds after application of DC current.

NOTE 4 Designate Radiation Hardened devices with "RH" prefix instead of "1N", i.e. RH944B instead of 1N944B.

**11.7 VOLT
 TEMPERATURE
 COMPENSATED
 ZENER REFERENCE
 DIODES**

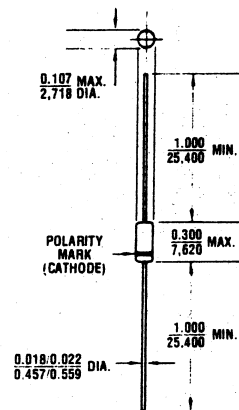


FIGURE 1
 All dimensions in INCH
 m.m.

MECHANICAL CHARACTERISTICS

CASE: Hermetically sealed glass case. DO-7.

FINISH: All external surfaces are corrosion resistant and leads solderable.

THERMAL RESISTANCE: $300^{\circ}\text{C}/\text{W}$ (Typical) junction to lead at 0.375-inches from body.

POLARITY: Diode to be operated with the banded end positive with respect to the opposite end.

WEIGHT: 0.2 grams.

MOUNTING POSITION: Any.

