



INTERNATIONAL SEMICONDUCTOR, INC.

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
19.2 VOLT NOMINAL ZENER VOLTAGE +/- 5%
LOW NOISE

MAXIMUM RATINGS *

Operating Temperature: -55 °C to +200 °C
Storage Temperature: -55 °C to +200 °C
DC Power Dissipation: 500 mW at 50 °C
Power Derating: 3.33 mW/°C above 50 °C

* ELECTRICAL CHARACTERISTICS @ 25 °C, unless otherwise specified

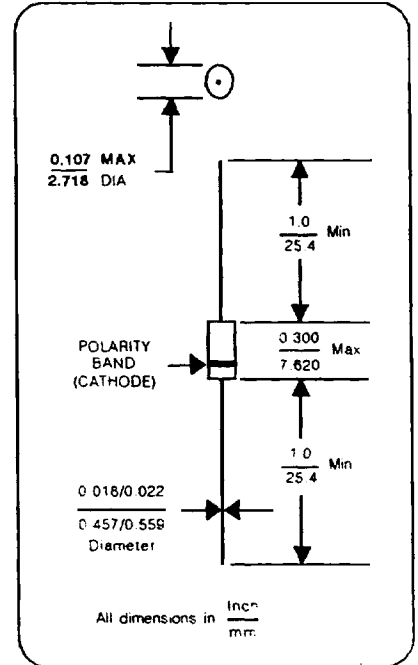
JEDEC TYPE NUMBERS	ZENER TEST CURRENT I _{ZT}	VOLTAGE TEMPERATURE STABILITY (Note 2) ΔV _{ZT}	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT	MAXIMUM ZENER IMPEDANCE (Note 1) Z ₁	MAXIMUM NOISE DENSITY N _d
1N4916 1N4916A 1N4917 1N4917A	0.5	144	+25 to +100	.01	600	1.0
	0.5	298	-55 to +100	.01	600	1.0
	0.5	72	+25 to +100	.005	600	1.0
	0.5	149	-55 to +100	.005	600	1.0
1N4918 1N4918A 1N4919 1N4919A	0.5	29	+25 to +100	.002	600	1.0
	0.5	60	-55 to +100	.002	600	1.0
	1.0	144	+25 to +100	.01	300	0.5
	1.0	298	-55 to +100	.01	300	0.5
1N4920 1N4920A 1N4921 1N4921A	1.0	72	+25 to +100	.005	300	0.5
	1.0	149	-55 to +100	.005	300	0.5
	1.0	29	+25 to +100	.002	300	0.5
	1.0	60	-55 to +100	.002	300	0.5
1N4922 1N4922A 1N4923 1N4923A	2.0	144	+25 to +100	.01	150	0.25
	2.0	298	-55 to +100	.01	150	0.25
	2.0	72	+25 to +100	.005	150	0.25
	2.0	149	-55 to +100	.005	150	0.25
1N4924 1N4924A 1N4925 1N4925A	2.0	29	+25 to +100	.002	150	0.25
	2.0	60	-55 to +100	.002	150	0.25
	4.0	144	+25 to +100	.01	75	0.22
	4.0	298	-55 to +100	.01	75	0.22
1N4926 1N4926A 1N4927 1N4927A	4.0	72	+25 to +100	.005	75	0.22
	4.0	149	-55 to +100	.005	75	0.22
	4.0	29	+25 to +100	.002	75	0.22
	4.0	60	-55 to +100	.002	75	0.22
1N4928 1N4928A 1N4929 1N4929A	4.0	14	+25 to +100	.001	75	0.22
	4.0	30	-55 to +100	.001	75	0.22
	7.5	144	+25 to +100	.01	36	0.20
	7.5	298	-55 to +100	.01	36	0.20
1N4930 1N4930A 1N4931 1N4931A 1N4932 1N4932A	7.5	72	+25 to +100	.005	36	0.20
	7.5	149	-55 to +100	.005	36	0.20
	7.5	29	+25 to +100	.002	36	0.20
	7.5	60	-55 to +100	.002	36	0.20
	7.5	14	+25 to +100	.001	36	0.20
	7.5	30	-55 to +100	.001	36	0.20

* JEDEC Registered Data.

NOTE 1 Zener impedance is derived by superimposing on I_{ZT} a 60 Hz rms a.c. current equal to 10% of I_{ZT}.

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

1N4916 thru 1N4932A



DESIGN DATA

CASE: Hermetically sealed glass case, DO-7 Outline.

LEAD MATERIAL: Copper Clad Steel

LEAD FINISH: Tin Plate

THERMAL RESISTANCE:
250 °C/w (Typical)
junction to ambient.

POLARITY: Diode to be operated with the banded (cathode) end positive with respect to the opposite end

WEIGHT: 0.2 Grams

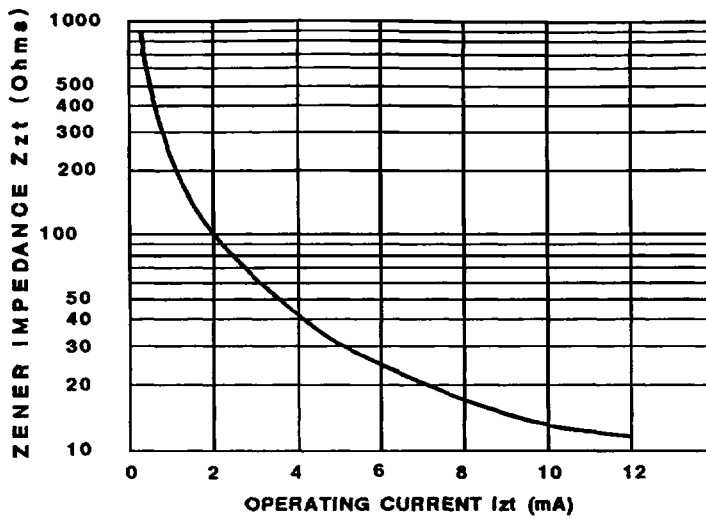
MOUNTING POSITION: Any

252 Cox Street, Roselle, NJ, USA, 07203-1704 ■ 908 245-2233

Toll-Free (800) 392-2474

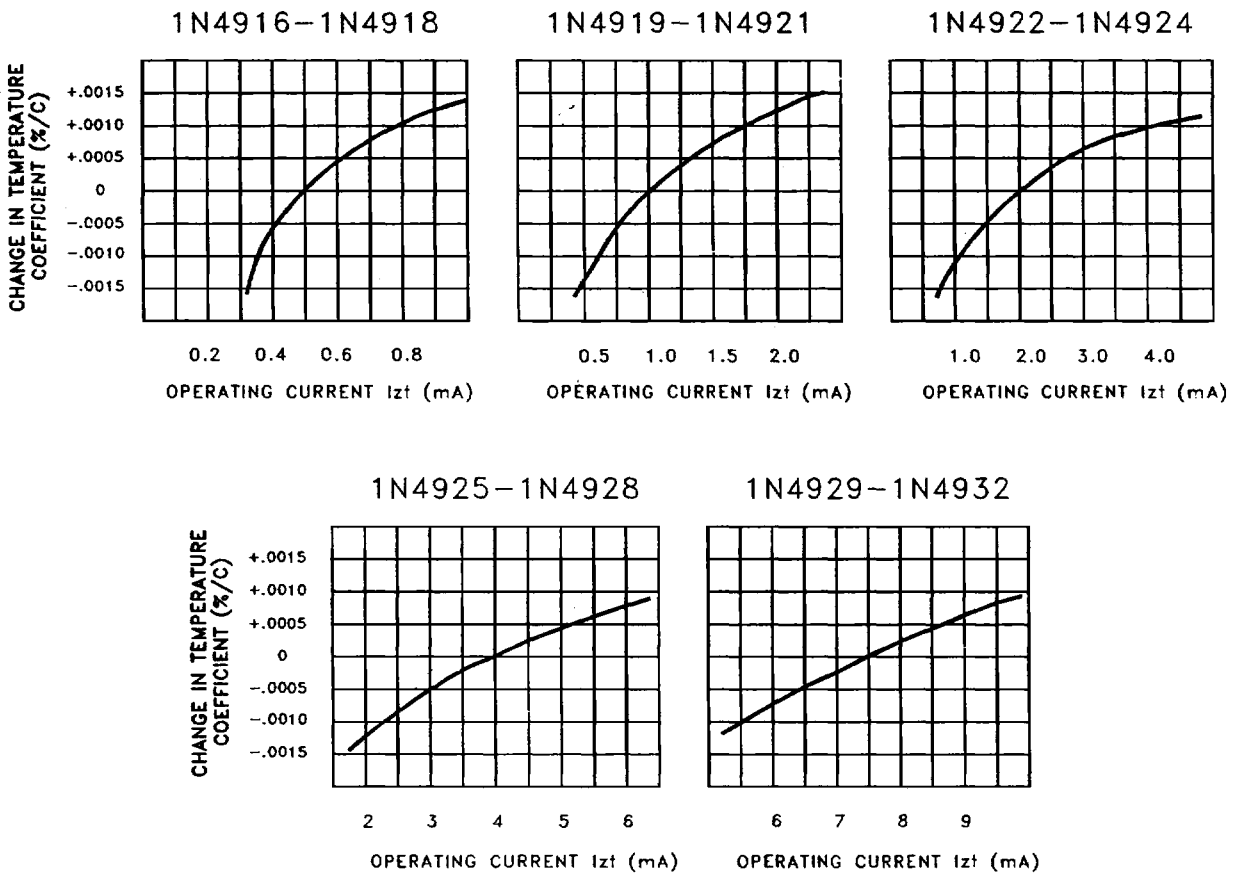
Fax: (908) 245-5541

1N4916 thru 1N4932A



**ZENER IMPEDANCE
VERSUS OPERATING CURRENT**

Figure 2



**TEMPERATURE COEFFICIENT
VERSUS OPERATING CURRENT**

FIGURE 3