

T-11-11


**International
Semiconductor, Inc.**

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES
11.7 VOLT NOMINAL ZENER VOLTAGE
LOW CURRENT RANGE: 0.5 and 1.0 mA

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 VOLTAGE Vz @ Izf	ZENER TEST CURRENT Izf	MAXIMUM ZENER IMPEDANCE (Note 1) Zzf	VOLTAGE TEMPERATURE STABILITY (Note 2) ΔV_{zf} MAXIMUM	TEMPERATURE RANGE	EFFECTIVE TEMPERATURE COEFFICIENT
	VOLTS	mA	OHMS	mV	DEGREES CENTIGRADE	%/C
1N4765	9.1	0.5	350	68	0 to +75	.01
1N47651	9.1	0.5	350	141	-55 to +100	.01
1N4766	9.1	0.5	350	34	0 to +75	.005
1N4766A	9.1	0.5	350	70	-55 to +100	.005
1N4767	9.1	0.5	350	14	0 to +75	.002
1N4767A	9.1	0.5	350	28	-55 to +100	.002
1N4768	9.1	0.5	350	6.8	0 to +75	.001
1N4768A	9.1	0.5	350	14	-55 to +100	.001
1N4769	9.1	0.5	350	3.4	0 to +75	.0005
1N4769A	9.1	0.5	350	7	-55 to +100	.0005
1N4770	9.1	1.0	200	68	0 to +75	.01
1N4770A	9.1	1.0	200	141	-55 to +100	.01
1N4771	9.1	1.0	200	34	0 to +75	.005
1N4771A	9.1	1.0	200	70	-55 to +100	.005
1N4772	9.1	1.0	200	14	0 to +75	.002
1N4772A	9.1	1.0	200	28	-55 to +100	.002
1N4773	9.1	1.0	200	6.8	0 to +75	.001
1N4773A	9.1	1.0	200	14	-55 to +100	.001
1N4774	9.1	1.0	200	34	0 to +75	.0005
1N4774A	9.1	1.0	200	7	-55 to +100	.0005

* JEDEC Registered Data.

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

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.

1N4765 thru 1N4774A

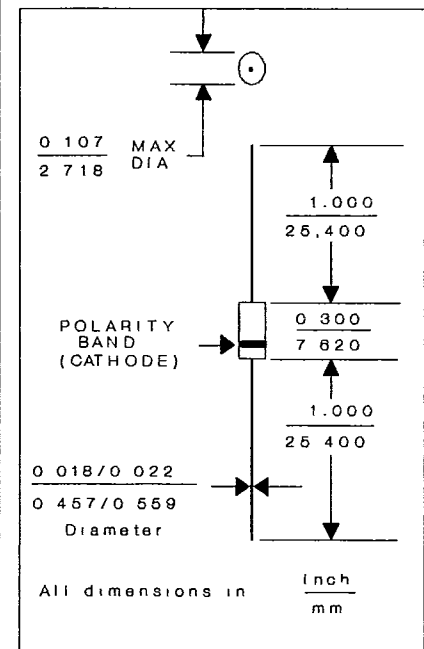


FIGURE 1

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

CORPORATE OFFICES:

727 Raritan Road - Suite 203
Clark, NJ 07066
Tel: 908 396-0322
Fax: 908 396-0410

SALES OFFICE:

574 E. Alamo, #40
Chandler, AZ 85225
Tel: 602 497-8172
Fax: 602 497-8173

T-11-11

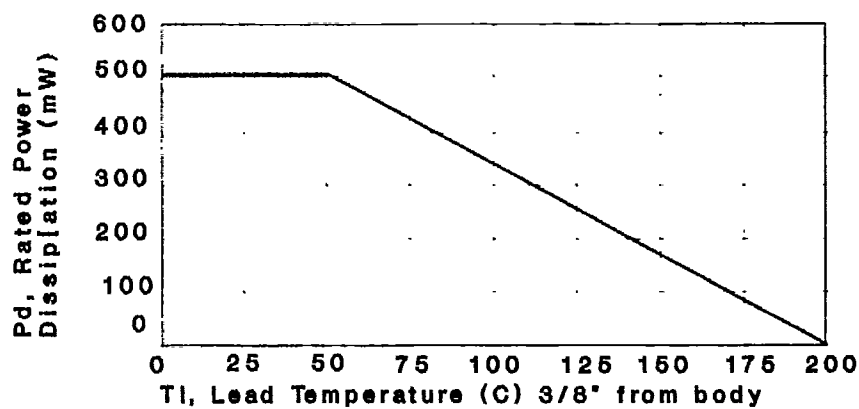
1N4765
thru
1N4774A

Figure 2
POWER DERATING CURVE

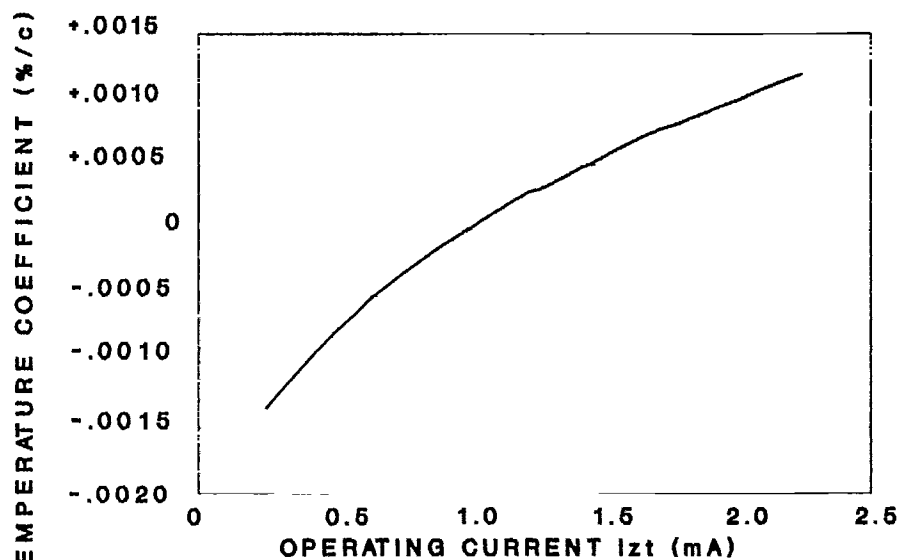


Figure 3
**TEMPERATURE COEFFICIENT
VERSUS OPERATING CURRENT**

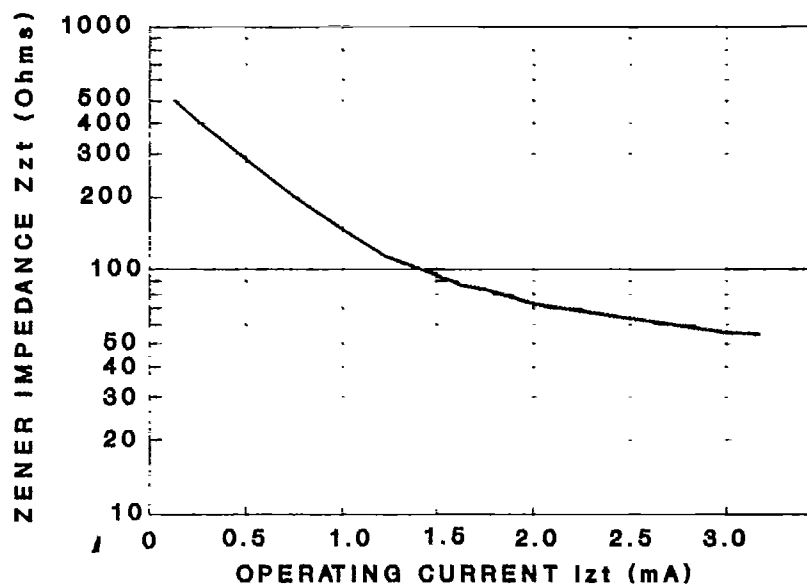


Figure 4
**ZENER IMPEDANCE
VERSUS OPERATING CURRENT**