



Microsemi Corp.
The diode experts



SCOTTSDALE, AZ
For more information call:
(602) 941-6300

**1N4565, A, -1
thru
1N4584, A, -1
DO-7**

FEATURES

- 6.4 V $\pm$ 5% ZENER VOLTAGE (NOTE 1)
- TEMPERATURE COEFFICIENT RANGE: 0.01%/°C to 0.0005%/°C
- ZENER TEST CURRENT RANGE: 500 μ A TO 4mA
- 1N4565A THRU 1N4574A HAVE JAN, JANTX, JANTXV, JANS, AND -1 QUALIFICATIONS TO MIL-S-19500/452
- RADIATION HARDENED DEVICES AVAILABLE (SEE NOTE 4)
- ALSO AVAILABLE IN DO-35 PACKAGE WITH JAN, JANTX, JANTXV-1 QUALIFICATIONS

MAXIMUM RATINGS

Power Dissipation: 475 mW, at 25°C

derate 3.16 mW/°C above 25°C

Operating and Storage Temperature: -65 to +175°C

* ELECTRICAL CHARACTERISTICS @ 25°C, unless otherwise specified

JEDEC TYPE NO.	NOTE 3) ZENER TEST CURRENT mA	MAXIMUM VOLTAGE $\alpha_{VZ} \pm \%/^{\circ}\text{C}$	TEMPERATURE COEFFICIENT $\pm \text{mV}/^{\circ}\text{C}$	TEMP. RANGE	MAX. DYNAMIC ZENER IMPEDANCE OHMS (Note 2)
1N4565	.5	.01	.64	0 to +75°C	200
1N4565A	.5	.01	.64	-55 to +100°C	200
1N4566	.5	.005	.32	0 to +75°C	200
1N4566A	.5	.005	.32	-55 to +100°C	200
1N4567	.5	.002	.13	0 to +75°C	200
1N4567A	.5	.002	.13	-55 to +100°C	200
1N4568	.5	.001	.06	0 to +75°C	200
1N4568A	.5	.001	.06	-55 to +100°C	200
1N4569	.5	.0005	.03	0 to +75°C	200
1N4569A	.5	.0005	.03	-55 to +100°C	200
1N4570	1.0	.01	.64	0 to +75°C	100
1N4570A	1.0	.01	.64	-55 to +100°C	100
1N4571	1.0	.005	.32	0 to +75°C	100
1N4571A	1.0	.005	.32	-55 to +100°C	100
1N4572	1.0	.002	.13	0 to +75°C	100
1N4572A	1.0	.002	.13	-55 to +100°C	100
1N4573	1.0	.001	.06	0 to +75°C	100
1N4573A	1.0	.001	.06	-55 to +100°C	100
1N4574	1.0	.0005	.03	0 to +75°C	100
1N4574A	1.0	.0005	.03	-55 to +100°C	100
1N4575	2.0	.01	.64	0 to +75°C	50
1N4575A	2.0	.01	.64	-55 to +100°C	50
1N4576	2.0	.005	.32	0 to +75°C	50
1N4576A	2.0	.005	.32	-55 to +100°C	50
1N4577	2.0	.002	.13	0 to +75°C	50
1N4577A	2.0	.002	.13	-55 to +100°C	50
1N4578	2.0	.001	.06	0 to +75°C	50
1N4578A	2.0	.001	.06	-55 to +100°C	50
1N4579	2.0	.0005	.03	0 to +75°C	50
1N4579A	2.0	.0005	.03	-55 to +100°C	50
1N4580	4.0	.01	.64	0 to +75°C	25
1N4580A	4.0	.01	.64	-55 to +100°C	25
1N4581	4.0	.005	.32	0 to +75°C	25
1N4581A	4.0	.005	.32	-55 to +100°C	25
1N4582	4.0	.002	.13	0 to +75°C	25
1N4582A	4.0	.002	.13	-55 to +100°C	25
1N4583	4.0	.001	.06	0 to +75°C	25
1N4583A	4.0	.001	.06	-55 to +100°C	25
1N4584	4.0	.0005	.03	0 to +75°C	25
1N4584A	4.0	.0005	.03	-55 to +100°C	25

* JEDEC Registered Data

NOTE 1 For specific device selections above requiring tighter tolerances than $\pm$ 5%, inquire with factory as to nominal zener voltage available.

NOTE 2 Measured by superimposing rms AC current equal to 10% zener test current @ 25°C. The temperature coefficient of zener impedance is approx. +0.3%/°C.

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., RH4584A.

6.4 VOLT TEMPERATURE COMPENSATED ZENER REFERENCE DIODES

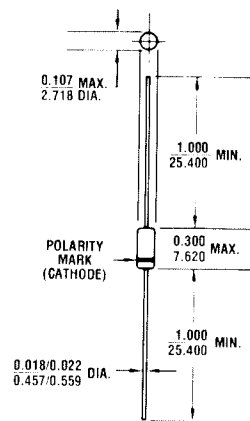


FIGURE 1

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°C/W (Typical) junction to lead at 0.375-inches from body.

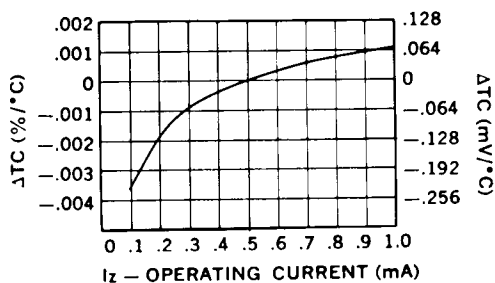
POLARITY: Diode to be operated with the banded end positive with respect to the opposite end.

WEIGHT: 0.2 grams.

MOUNTING POSITION: Any.

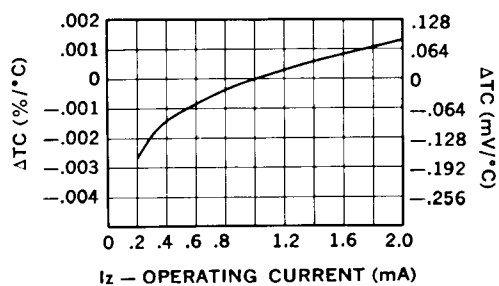
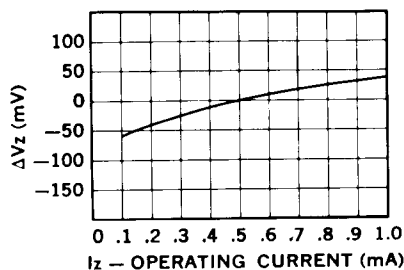
1N4565, A, -1 thru 1N4584, A, -1 DO-7

TYPICAL CHANGE OF
TEMPERATURE COEFFICIENT
WITH CHANGE IN
OPERATING CURRENT

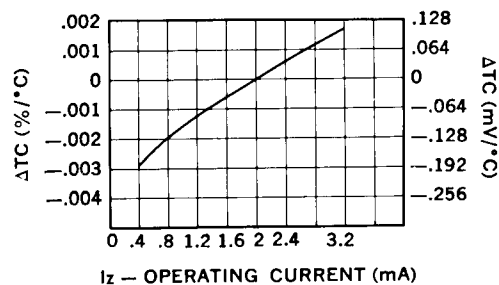
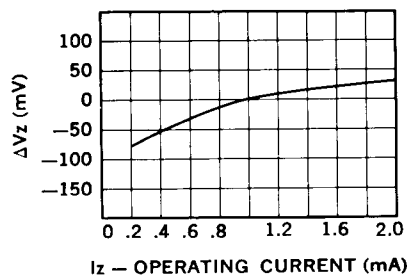


1N4565 — 1N4569A

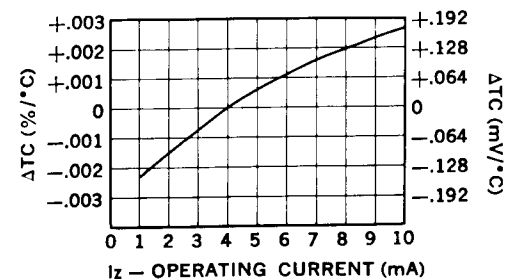
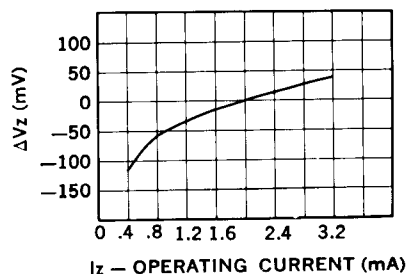
TYPICAL CHANGE
IN ZENER VOLTAGE
WITH CHANGE IN
OPERATING CURRENT



1N4570 — 1N4574A



1N4575 — 1N4579A



1N4580 — 1N4584A

