ALSO AVAILABLE IN SURFACE MOUNT

Microsemi Corp.
The diode experts

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

1N5728 thru 1N5757

SILICON 400 mW ZENER DIODES

FEATURES

- ZENER VOLTAGE 4.7 TO 75 V
- SMALL RUGGED DOUBLE SLUG CONSTRUCTION DO-35
- CONSTRUCTED WITH AN OXIDE PASSIVATED ALL DIFFUSED DIE

MAXIMUM RATINGS

Operating Temperature: −65°C to +200°C
DC Power Dissipation: 400 mW
Power Derating: 2.63 mW/°C above 50°C
Forward Voltage @ 10 mA: 0.9 Volts

*ELECTRICAL CHARACTERISTICS @ 25°C

TYPE NUMBER (Note 1)	REGULATOR VOLTAGE	TEST CURRENT	DYNAMIC IMPEDANCE	REVERSE CURRENT	I_R TEST VOLTAGE	MAXIMUM REGULATOR CURRENT	TEMPERATURE COEFFICIENT
	(V_Z) VOLTS	(I_Z) MODE	(Z_Z) OHMS	(I_R) μa	(V_R) VOLTS	(I_{ZM}) mA	(α_{VZ}) mV/°C
1N5728B	4.7	10	70	3.0	2	70	−1.0
1N5729B	5.1	10	50	3.0	2	65	−0.2
1N5730B	5.6	10	25	3.0	2	60	+1.2
1N5731B	6.2	10	10	3.0	4	55	+2.3
1N5732B	6.8	10	10	3.0	4	50	+3.0
1N5733B	7.5	10	10	2.0	5	45	+4.0
1N5734B	8.2	10	15	1.0	5	40	+5.0
1N5735B	9.1	10	15	0.5	6	40	+6.0
1N5736B	10	10	20	0.2	7	35	+7.0
1N5737B	11	5	20	0.1	8	30	+8.0
1N5738B	12	5	25	0.1	8	30	+9.0
1N5739B	13	5	30	0.1	9	25	+10.5
1N5740B	15	5	30	0.1	10	25	+12.9
1N5741B	16	5	40	0.1	11	20	+13
1N5742B	18	5	45	0.1	12	20	+15
1N5743B	20	5	55	0.1	14	15	+17
1N5744B	22	5	55	0.1	15	15	+19
1N5745B	24	5	70	0.1	17	15	+21
1N5746B	27	2	80	0.1	19	10	+23.5
1N5747B	30	2	80	0.1	21	10	+26
1N5748B	33	2	90	0.1	23	10	+29
1N5749B	36	2	90	0.1	25	10	+31
1N5750B	39	2	130	0.1	27	9	+34
1N5751B	43	2	150	0.1	30	9	+37
1N5752B	47	2	170	0.1	33	8	+40
1N5753B	51	2	180	0.1	36	7	+44
1N5754B	56	2	200	0.1	39	6	+47
1N5755B	62	2	215	0.1	43	6	+51
1N5756B	68	2	240	0.1	48	5	+56
1N5757B	75	2	255	0.1	53	5	+60

*JEDEC Registered Data. The Type Number indicates 5% Tolerance. See Note 1.

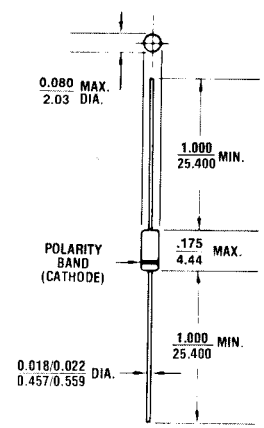


FIGURE 1

All dimensions in INCH / m.m.

MECHANICAL CHARACTERISTICS

CASE: Hermetically sealed glass case. DO-35.

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

THERMAL RESISTANCE: 200°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.

NOTE 1 Devices listed have a ±5% voltage tolerance on nominal V_Z. Suffix C denotes a ±2% tolerance and suffix D denotes a ±1% tolerance.

NOTE 2 All static parameters measured under pulsed conditions, t_p = 300 μsec.

NOTE 3 Dynamic Impedance measured by superimposing 0.2 mA Iac rms at 1000 hz on I DC.

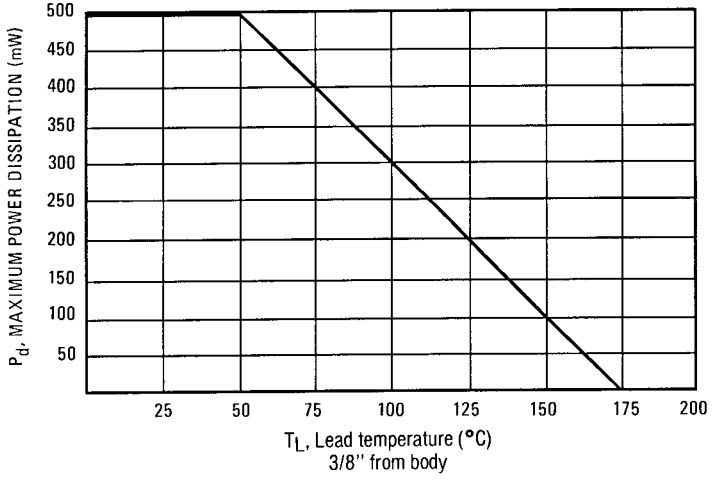


FIGURE 2 POWER DERATING CURVE