



Microsemi Corp.
The diode experts

1N5728 thru 1N5757

SCOTTSDALE, AZ

For more information call:
(602) 941-6300

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 $+200^{\circ}\text{C}$

DC Power Dissipation: 400 mW

Power Derating: 2.63 mW/ $^{\circ}\text{C}$ above 50°C

Forward Voltage @ 10 mA: 0.9 Volts

**SILICON
400 mW
ZENER DIODES**

*ELECTRICAL CHARACTERISTICS @ 25°C

| TYPE NUMBER (Note 1) | REGULATOR VOLTAGE | TEST CURRENT | DYNAMIC IMPEDANCE | REVERSE CURRENT | I _v TEST VOLTAGE | MAXIMUM REGULATOR CURRENT | TEMPERATURE COEFFICIENT |
|-------------------------|-------------------------|------------------------|------------------------|---------------------------------|-----------------------------|---------------------------|--|
| | (V _r) VOLTS | (I _t) MODE | (Z _d) OHMS | (I _r) μA | (V _v) VOLTS | (I _z) mA | (α_{vz}) mV/ $^{\circ}\text{C}$ |
| 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 |

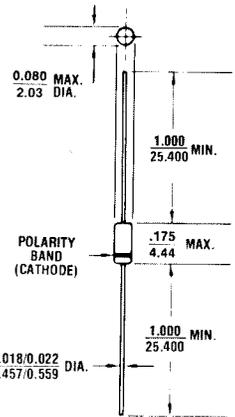


FIGURE 1

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: $200^{\circ}\text{C}/\text{W}$ (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.

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

1N5728 thru 1N5757

[查询"1N5728"供应商](#)

NOTE 1 Diodes listed have a $\pm 5\%$ voltage tolerance on nominal V_Z . Suffix C denotes a $\pm 2\%$ tolerance and suffix D denotes a $\pm 1\%$ tolerance.

NOTE 2 All static parameters measured under pulsed conditions, $t_p = 300 \mu\text{sec}$.

NOTE 3 Dynamic Impedance measured by superimposing 0.2 mA I_{ac} rms at 1000 hz on I_{DC} .

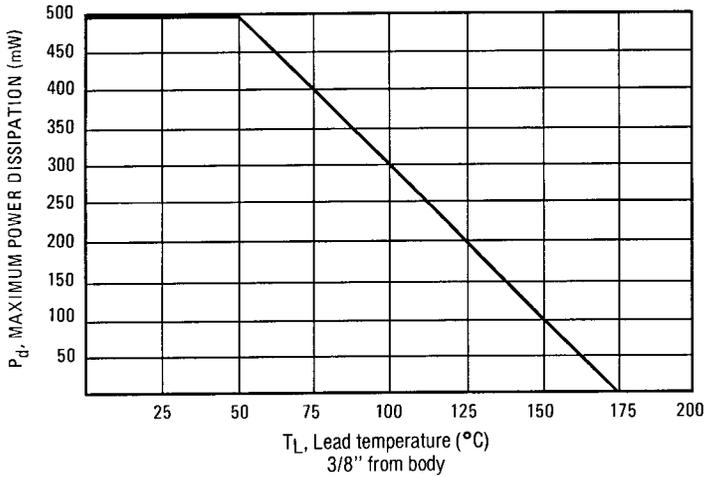


FIGURE 2 POWER DERATING CURVE