

**Micro Commercial Components** 

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# 1N5268 THRU 1N5276

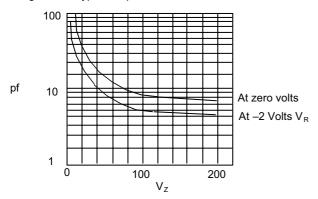
### **Features**

- Wide Voltage Range Available
- Glass Package
- High Temp Soldering: 260°C for 10 Seconds At Terminals
- Marking: Cathode band and type number
- Lead Free Finish/Rohs Compliant (Note1) ("P"Suffix designates Compliant. See ordering information)
- Moisture Sensitivity: Level 1 per J-STD-020C

## **Maximum Ratings**

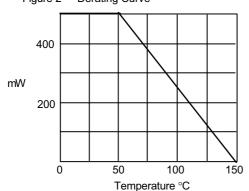
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- 500 mWatt DC Power Dissipation
- Power Derating: 4.0mW/°C above 50°C
- Forward Voltage @ 200mA: 1.1 Volts

Figure 1 - Typical Capacitance



Typical Capacitance (pf) – versus – Zener voltage (V<sub>z</sub>)

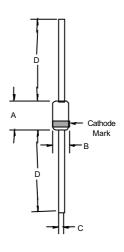
Figure 2 - Derating Curve



Power Dissipation (mW) - Versus - Temperature °C

500 mW Zener Diode 82 to 150 Volts

DO-35



| DIMENSIONS |        |      |       |      |      |  |  |  |
|------------|--------|------|-------|------|------|--|--|--|
|            | INCHES |      | ММ    |      |      |  |  |  |
| DIM        | MIN    | MAX  | MIN   | MAX  | NOTE |  |  |  |
| Α          |        | .166 |       | 4.2  |      |  |  |  |
| В          |        | .079 |       | 2.00 |      |  |  |  |
| С          |        | .020 |       | .52  |      |  |  |  |
| D          | 1.000  |      | 25.40 |      |      |  |  |  |
|            |        |      |       |      |      |  |  |  |

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

# 1N5268 thru 1N5276



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#### **ELECTRICAL CHARACTERISTICS @25°C**

| MCC<br>PART<br>NUMBER | NOMINAL ZENER<br>VOLTAGE Vz @ I <sub>ZT</sub> | TEST<br>CURRENT I <sub>ZT</sub> | MAXIMUM ZENER IMPEDANCE 'B' SUFFIX ONLY  Z <sub>ZT</sub> @ I <sub>ZT</sub> Z <sub>ZK</sub> @I <sub>ZK</sub> = 0.25mA |      | MAXIMUM REVERSE<br>LEAKAGE CURRENT<br>I <sub>R</sub> @ V <sub>R</sub> |       | MAX. ZENER VOLTAGE<br>TEMP COEFFICIENT 'B'<br>SUFFIX ONLY |
|-----------------------|---|---------------------------------|--|------|---|-------|---|
| Nombert               | VOLTS   | mA                              | OHMS   | OHMS | μΑ  | VOLTS | % / °C  |
| 1N5268                | 82  | 1.5                             | 330  | 2000 | 0.1   | 62    | +0.098  |
| 1N5269                | 87  | 1.4                             | 370  | 2200 | 0.1   | 68    | +0.099  |
| 1N5270                | 91  | 1.4                             | 400  | 2300 | 0.1   | 69    | +0.099  |
| 1N5272                | 110   | 1.1                             | 750  | 3000 | 0.1   | 84    | +0.110  |
| 1N5273                | 120   | 1.0                             | 900  | 4000 | 0.1   | 91    | +0.110  |
| 1N5274                | 130   | 0.95                            | 1100   | 4500 | 0.1   | 99    | +0.110  |
| 1N5275                | 140   | 0.90                            | 1300   | 4500 | 0.1   | 106   | +0.110  |
| 1N5276                | 150   | 0.85                            | 1500   | 5000 | 0.1   | 114   | +0.110  |

NOTE 1: Table as shown lists type numbers, which indicate a tolerance of ±20% with guaranteed limits on only Vz, I<sub>R</sub>, and V<sub>F</sub>. Devices with guaranteed limits on all six parameters are indicated by suffix "A" for  $\pm 10\%$ , "B" for  $\pm 5\%$ , "C" for  $\pm 2\%$  tolerance NOTE 2: The electrical characteristics are measured after allowing the device to stabilize for 20 seconds.

NOTE 3: Temperature coefficient ( $\acute{a}_{VZ}$ ). Test conditions for temperature coefficient are as follows: a.  $l_{ZT} = 7.5$ mA,  $T_1 = 25$ °C  $T_2 = 125$ °C (1N5221 thru 1N5242) b.  $l_{ZT} = Rated l_{ZT}$ ,  $T_1 = 25$ °C,  $T_2 = 125$ °C (1N5243 thru 1N5276)

Device to be temperature stabilized with current applied prior to reading breakdown voltage at the specified ambient temperature.



### **Ordering Information**

| Device           | Packing                    |
|------------------|----------------------------|
| (Part Number)-TP | Tape&Reel 10Kpcs/Reel      |
| (Part Number)-AP | Ammo Packing;5Kpcs/AmmoBox |
| (Part Number)-BP | Bulk;500pcs/Bag            |

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