Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311
Phone: (818) 701-4933
Fax: (818) 701-4939

## Features

- Wide Voltage Range Available
- Glass Package
- High Temp Soldering: $260^{\circ} \mathrm{C}$ 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: $-55^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$
- Storage Temperature: $-55^{\circ} \mathrm{C}$ to $+150^{\circ} \mathrm{C}$
- 500 mWatt DC Power Dissipation
- Power Derating: $4.0 \mathrm{~mW} /{ }^{\circ} \mathrm{C}$ above $50^{\circ} \mathrm{C}$
- Forward Voltage @ 200mA: 1.1 Volts


Typical Capacitance (pf) - versus $\square$ Zener voltage ( $\mathrm{V}_{\mathrm{z}}$ )
Figure 2 - Derating Curve


Power Dissipation (mW) - Versus - Temperature ${ }^{\circ} \mathrm{C}$


| 500 mW |
| :---: |
| Zener Diode |
| 82 to 150 Volts |



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

## ELECTRICAL CHARACTERISTICS @ $25^{\circ}$ C

| $\begin{aligned} & \text { MCC } \\ & \text { PART } \end{aligned}$ NUMBER | NOMINAL ZENER VOLTAGE Vz @ Izt VOLTS | TEST CURRENT I ${ }_{z t}$ mA | MAXIMUM ZENER IMPEDANCE 'B' SUFFIX ONLY$\mathrm{Z}_{\mathrm{ZT}} @ \mathrm{I}_{\mathrm{ZT}} . \quad \mathrm{Z}_{\mathrm{ZK}} @ \mathrm{I}_{\mathrm{ZK}}=0.25 \mathrm{~mA}$ |  | MAXIMUM REVERSE LEAKAGE CURRENT |  | MAX. ZENER VOLTAGE TEMP COEFFICIENT 'B’ SUFFIX ONLY $\% /{ }^{\circ} \mathrm{C}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | OHMS | OHMS | $\mu \mathrm{A}$ | VOLTS |  |
| 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 $\pm 20 \%$ with guaranteed limits on only $V_{z}$, $l_{R}$, and $V_{F}$. 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 (ávz). Test conditions for temperature coefficient are as follows:
a. $\mathrm{I}_{\mathrm{zT}}=7.5 \mathrm{~mA}, \mathrm{~T}_{1}=25^{\circ} \mathrm{C}_{2}=125^{\circ} \mathrm{C}$ (1N5221 thru 1 N 5242 )
b. $\quad \mathrm{I}_{\mathrm{zt}}=$ Rated $\mathrm{kr}, \mathrm{T}_{1}=25^{\circ} \mathrm{C}, \mathrm{T}_{2}=125^{\circ} \mathrm{C}$ (1N5243 thru 1N5276)

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

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## 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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