



**THE DATASHEET OF  
1N5400-TP**



## Features

- Low Current Leakage And Low Forward Voltage
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 15°C/W Junction to Ambient(Note2)

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| 1N5400          | 1N5400         | 50V                                    | 35V                 | 50V                         |
| 1N5401          | 1N5401         | 100V                                   | 70V                 | 100V                        |
| 1N5402          | 1N5402         | 200V                                   | 140V                | 200V                        |
| 1N5404          | 1N5404         | 400V                                   | 280V                | 400V                        |
| 1N5405          | 1N5405         | 500V                                   | 350V                | 500V                        |
| 1N5406          | 1N5406         | 600V                                   | 420V                | 600V                        |
| 1N5407          | 1N5407         | 800V                                   | 560V                | 800V                        |
| 1N5408          | 1N5408         | 1000V                                  | 700V                | 1000V                       |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

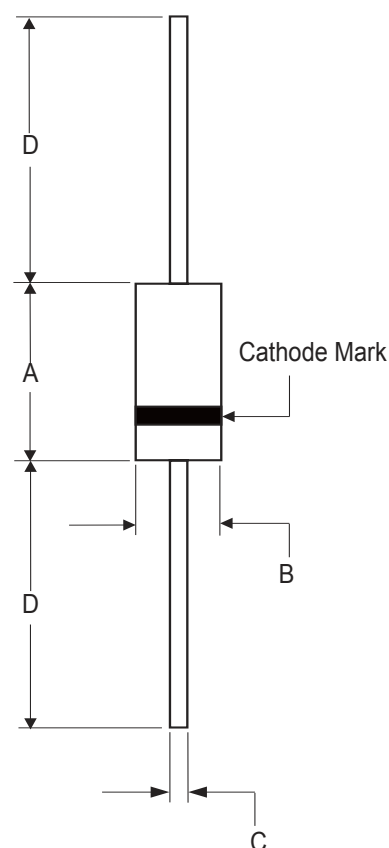
|   |             |  |   |
|---|-------------|--|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 3.0A                                   | $T_A=105^\circ\text{C}$                       |
| Peak Forward Surge Current                              | $I_{FSM}$   | 200A                                   | 8.3ms, Half Sine                              |
| Forward Voltage   | $V_F$       | 1.0V                                   | $I_F=3.0\text{A}; T_J=25^\circ\text{C}$       |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5.0 $\mu\text{A}$<br>100 $\mu\text{A}$ | $T_J=25^\circ\text{C}; T_J=150^\circ\text{C}$ |
| Typical Junction Capacitance                            | $C_J$       | 40pF                                   | Measured at 1.0MHz, $V_R=4.0\text{V}$         |

Note :

1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.
2. Valid Provided That Leads are Kept at Ambient Temperature at a Distance of 9.5mm From The Case.

# 3 Amp Rectifier 50 to 1000 Volts

## DO-201AD



| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCHES     |       | MM    |       |      |
|     | MIN        | MAX   | MIN   | MAX   |      |
| A   | 0.287      | 0.374 | 7.30  | 9.50  |      |
| B   | 0.189      | 0.208 | 4.80  | 5.30  |      |
| C   | 0.048      | 0.052 | 1.20  | 1.30  |      |
| D   | 1.000      | ----- | 25.40 | ----- |      |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

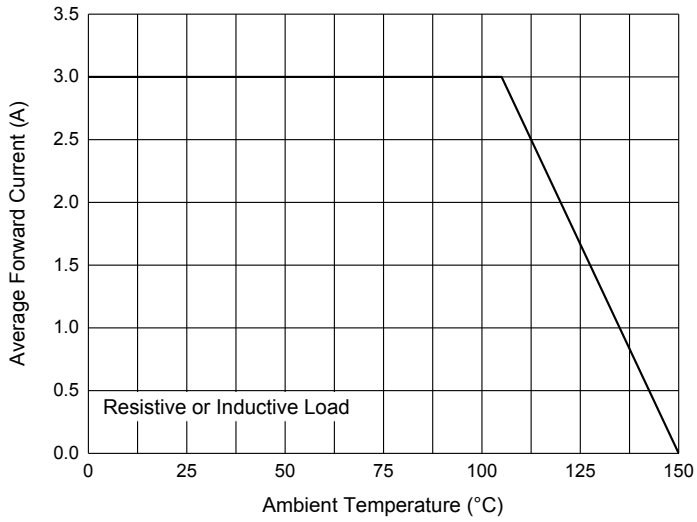


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

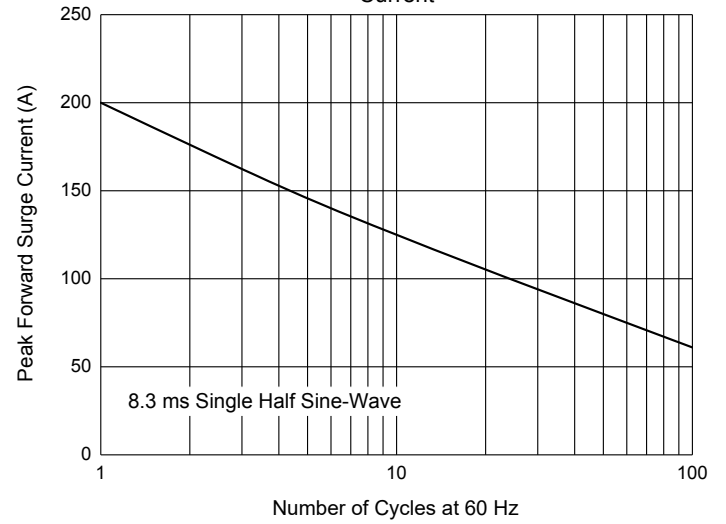


Fig. 3 - Typical Instantaneous Forward Characteristics

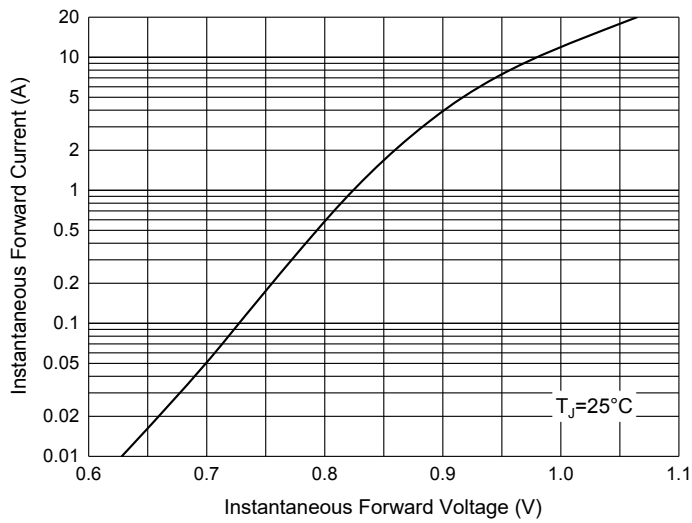
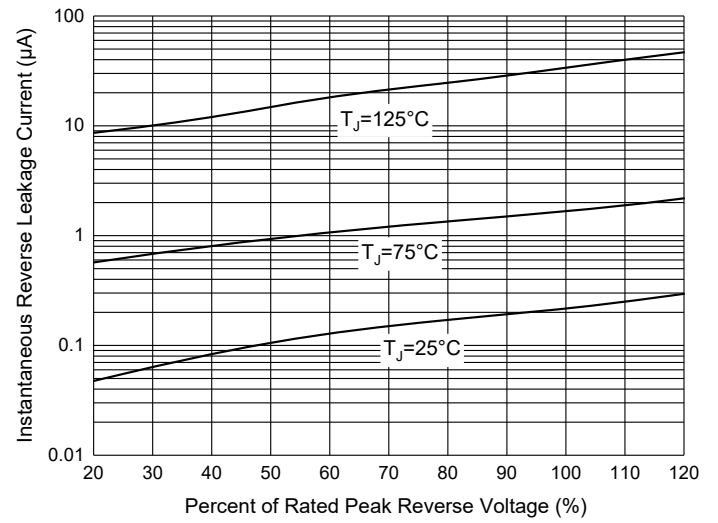


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                        |
|----------------|--------------------------------|
| Part Number-TP | Tape&Reel: 1.2Kpcs/Reel        |
| Part Number-AP | Ammo Packing: 1.2Kpcs/Ammo Box |
| Part Number-BP | Bulk:500pcs/Box, 12Kpcs/Carton |

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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