

**Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Forward Voltage Drop And High Surge Capability
- Ultra Fast Switching Speed For High Efficiency
- Halogen Free Available Upon Request By Adding Suffix "-HF"

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 20°C/W Junction to Ambient
- Typical Thermal Resistance: 13°C/W Junction to Case
- Typical Thermal Resistance: 8.5°C/W Junction to Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| UF5400GP        | UF5400GP       | 50V                                    | 35V                 | 50V                         |
| UF5401GP        | UF5401GP       | 100V                                   | 70V                 | 100V                        |
| UF5402GP        | UF5402GP       | 200V                                   | 140V                | 200V                        |
| UF5404GP        | UF5404GP       | 400V                                   | 280V                | 400V                        |
| UF5406GP        | UF5406GP       | 600V                                   | 420V                | 600V                        |
| UF5407GP        | UF5407GP       | 800V                                   | 560V                | 800V                        |
| UF5408GP        | UF5408GP       | 1000V                                  | 700V                | 1000V                       |

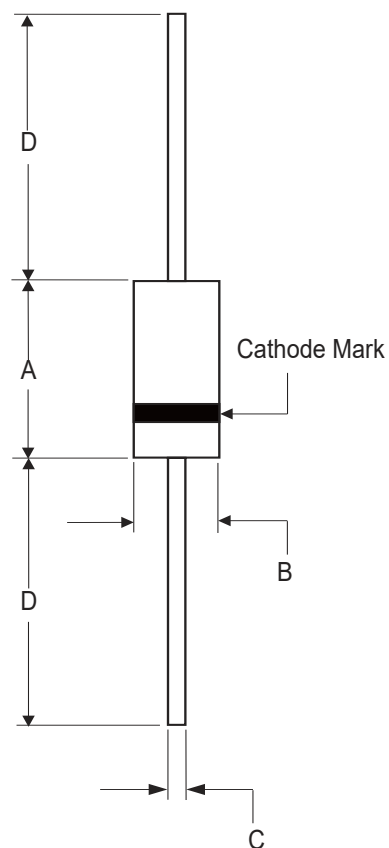
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

|   |             |                       |   |
|---|-------------|-----------------------|---|
| Average Forward Current   | $I_{F(AV)}$ | 3.0A                  | See Fig. 1                              |
| Peak Forward Surge Current  | $I_{FSM}$   | 100A                  | 8.3ms, Half Sine                        |
| Maximum Instantaneous Forward Voltage<br>UF5400GP-5402GP<br>UF5404GP<br>UF5406GP-5408GP | $V_F$       | 0.95V<br>1.3V<br>1.7V | $I_{FM}=3.0A;$<br>$T_A=25°C$            |
| Maximum DC Reverse Current At Rated DC Blocking Voltage                                 | $I_R$       | 10µA<br>50µA          | $T_A=25°C;$<br>$T_A=100°C$              |
| Maximum Reverse Recovery Time<br>UF5400GP-5404GP<br>UF5406GP-5408GP                     | $t_{rr}$    | 50ns<br>75ns          | $I_F=0.5A; I_R=1.0A;$<br>$I_{RR}=0.25A$ |
| Typical Junction Capacitance<br>UF5400GP-5404GP<br>UF5406GP-5408GP                      | $C_J$       | 75pF<br>50pF          | Measured at 1.0MHz, $V_R=4.0V$          |

Note : 1. High Temperature Solder Exemption Applied, See EU Directive Annex Notes 7a.

**3 Amp Ultra Fast Glass Passivated Recovery Rectifier 50 to 1000 Volts**

DO-201AD



| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | 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

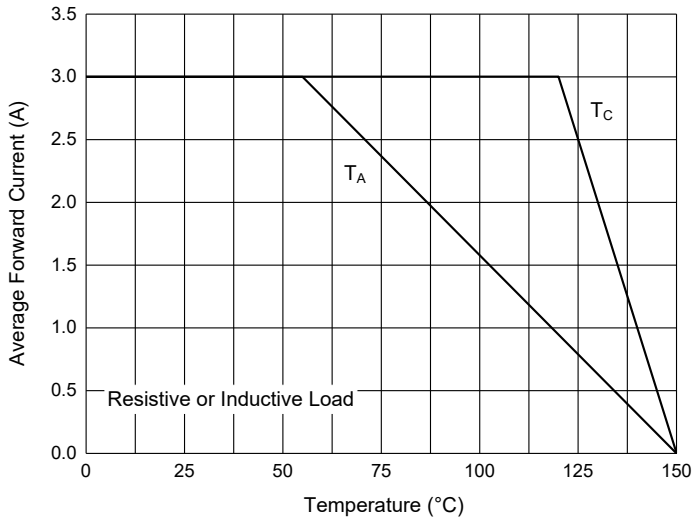


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

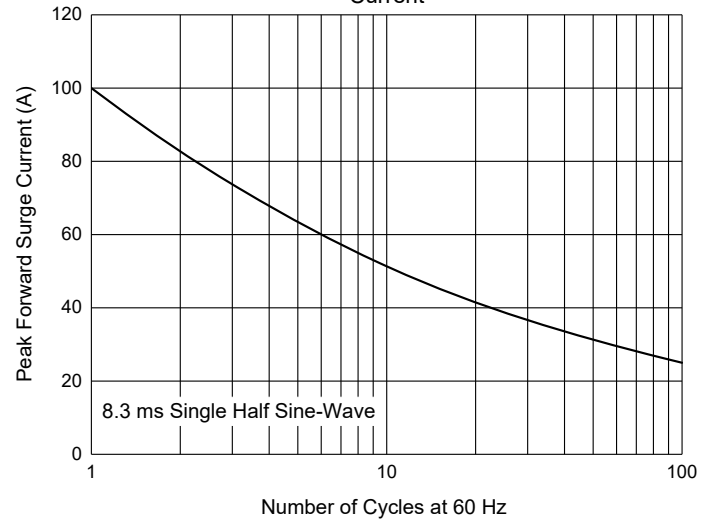


Fig. 3 - Typical Instantaneous Forward Characteristics

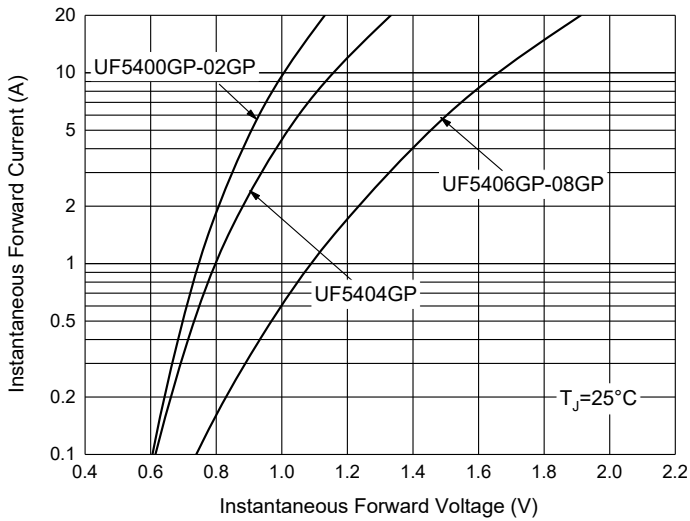
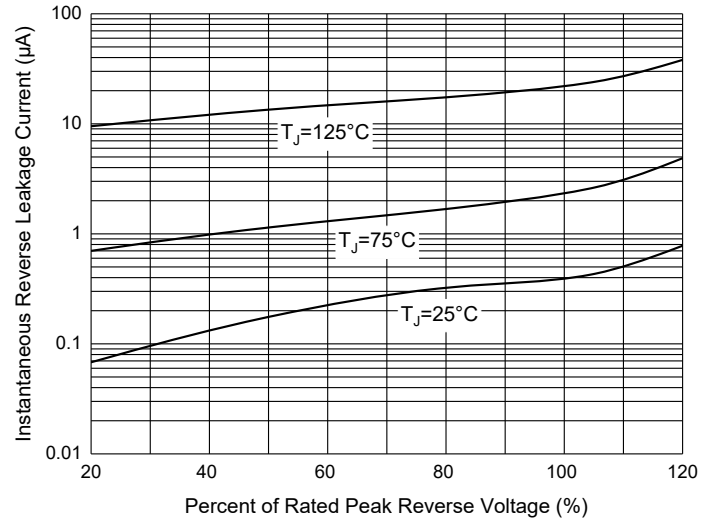


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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