

**VOLTAGE RANGE: 100 -200V**

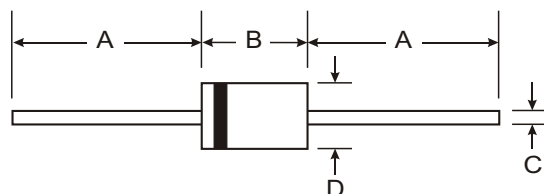
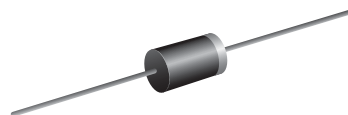
**CURRENT: 1.0 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time

### Mechanical Data

- Case: DO - 41 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



| DO-41                |       |       |
|----------------------|-------|-------|
| Dim                  | Min   | Max   |
| A                    | 25.40 | —     |
| B                    | 4.06  | 5.21  |
| C                    | 0.71  | 0.864 |
| D                    | 2.00  | 2.72  |
| All Dimensions in mm |       |       |

### Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic                                                                                          | Symbol      | FGP10B        | FGP10C | FGP10D | Unit             |
|---------------------------------------------------------------------------------------------------------|-------------|---------------|--------|--------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                  | $V_{RRM}$   | 100           | 150    | 200    | Volts            |
| Maximum RMS Voltage                                                                                     | $V_{RMS}$   | 70            | 105    | 140    | Volts            |
| Maximum DC Blocking Voltage                                                                             | $V_{DC}$    | 100           | 150    | 200    | Volts            |
| Maximum Average Forward Current<br>0.375"(9.5mm) Lead Length $T_A = 55^\circ\text{C}$                   | $I_{F(AV)}$ | 1.0           |        |        | Amp.             |
| Peak Forward Surge Current,<br>8.3ms Single half sine wave superimposed<br>on rated load (JEDEC Method) | $I_{FSM}$   | 30            |        |        | Amps.            |
| Maximum Peak Forward Voltage at $I_F = 1.0\text{ A}$ .                                                  | $V_F$       | 0.95          |        |        | Volts            |
| Maximum DC Reverse Current<br>at Rated DC Blocking Voltage                                              | $I_R$       | 5.0           |        |        | $\mu\text{A}$    |
| Maximum Reverse Recovery Time ( Note 1 )                                                                | $T_{rr}$    | 35            |        |        | ns               |
| Typical Junction Capacitance ( Note 2 )                                                                 | $C_J$       | 50            |        |        | pf               |
| Junction Temperature Range                                                                              | $T_J$       | - 65 to + 150 |        |        | $^\circ\text{C}$ |
| Storage Temperature Range                                                                               | $T_{STG}$   | - 65 to + 150 |        |        | $^\circ\text{C}$ |

### Notes :

- ( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5\text{ A}$ ,  $I_R = 1.0\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0  $V_{DC}$

## RATINGS AND CHARACTERISTICS CURVES ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

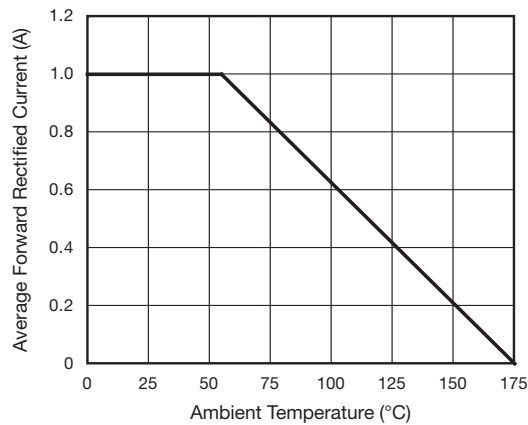


Fig. 1 - Maximum Forward Current Derating Curve

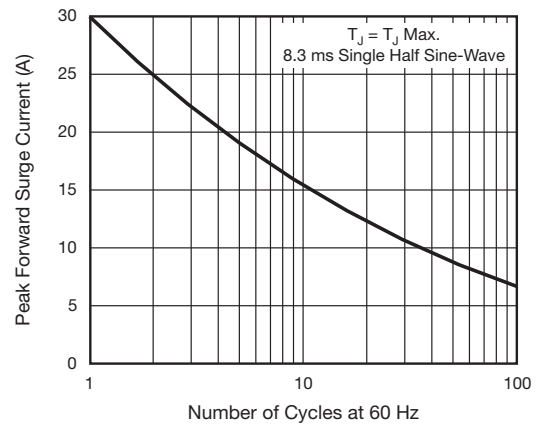


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

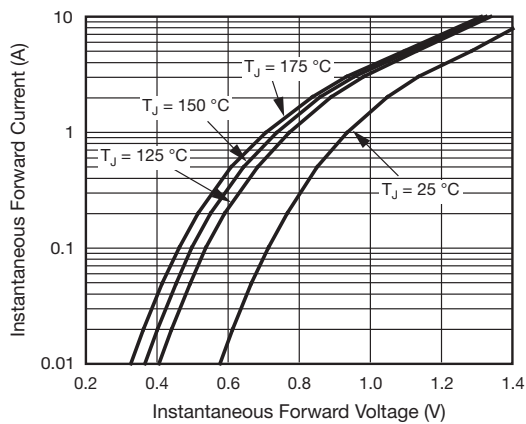


Fig. 3 - Typical Instantaneous Forward Characteristics

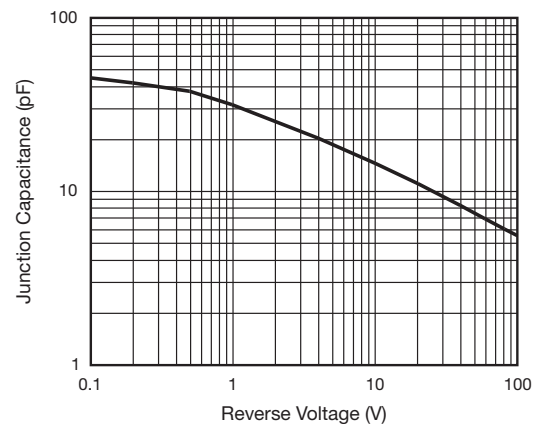


Fig. 5 - Typical Junction Capacitance

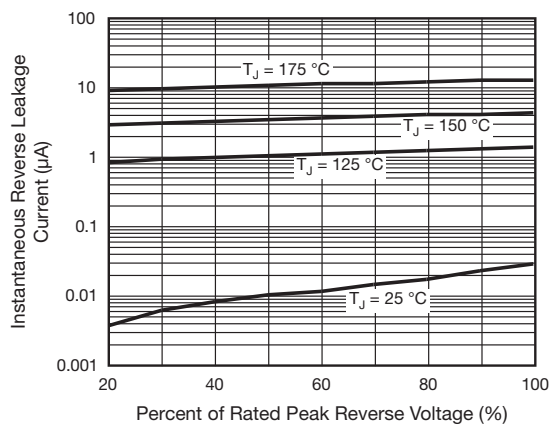


Fig. 4 - Typical Reverse Leakage Characteristics

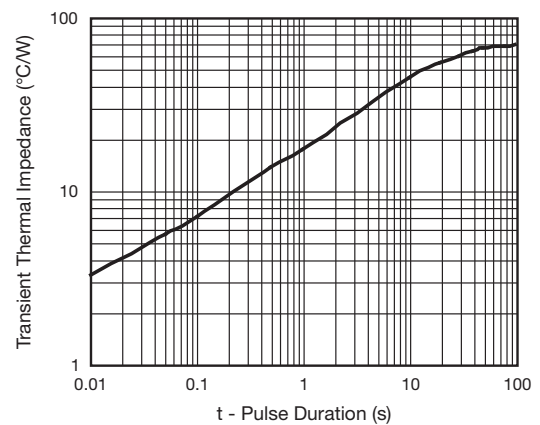


Fig. 6 - Typical Transient Thermal Impedance