



Shanghai Lunsure Electronic
Technology Co.,Ltd
Tel:0086-21-37185008
Fax:0086-21-57152769

GP10A THRU GP10M

Features

- High temperature metallurgically bonded construction
- Glass passivated cavity-free junction, Plastic Case
- 1.0 ampere operation at $T_A=75^{\circ}\text{C}$ and 55°C with no thermal runaway.
- Typical r_k less than $0.1\mu\text{A}$

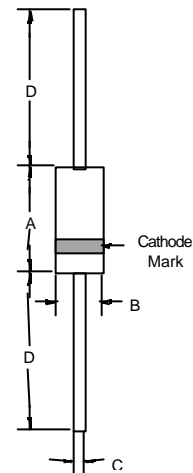
1.0 Amp Glass Passivated Junction Rectifiers 50 to 1000 Volts

Maximum Ratings

- Operating Temperature: -55°C to $+150^{\circ}\text{C}$
- Storage Temperature: -55°C to $+150^{\circ}\text{C}$
- Typical Thermal Resistance: 55°C/W Junction to Ambient

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-------------|--|---------------------|-----------------------------|
| GP10A | 50V | 35V | 50V |
| GP10B | 100V | 70V | 100V |
| GP10D | 200V | 140V | 200V |
| GP10G | 400V | 280V | 400V |
| GP10J | 600V | 420V | 600V |
| GP10K | 800V | 560V | 800V |
| GP10M | 1000V | 700V | 1000V |

DO-41



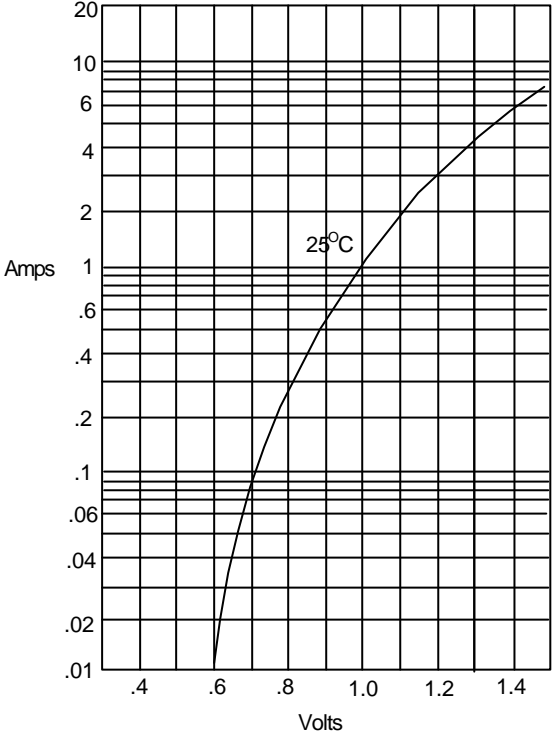
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|--|-------------|----------------|---|
| Maximum Average Forward Current | $I_{F(AV)}$ | 1.0 A | $T_A = 75^{\circ}\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage GP10A -10J GP10K-10M | V_F | 1.1V 1.2V | $I_{FM} = 1.0\text{A};$ $T_A = 25^{\circ}\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5.0uA 50uA | $T_A = 25^{\circ}\text{C}$ $T_A = 125^{\circ}\text{C}$ |
| Typical Junction Capacitance GP10A -10J GP10K-10M | C_J | 8.0pF 7.0pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|------|------|
| | INCHES | | MM | | |
| A | .166 | .205 | 4.10 | 5.20 | |
| B | .080 | .107 | 2.00 | 2.70 | |
| C | .028 | .034 | .70 | .90 | |
| D | 1.000 | --- | 25.40 | --- | |

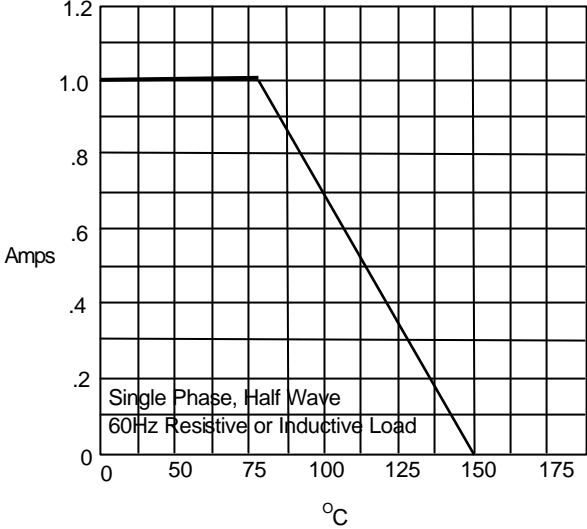
GP10A thru GP10M

Figure 1
Typical Forward Characteristics



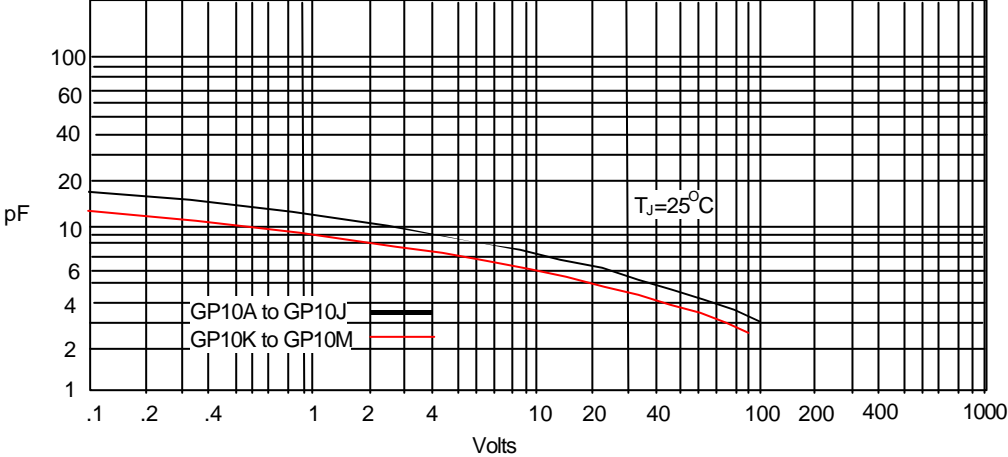
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes versus
Ambient Temperature - °C

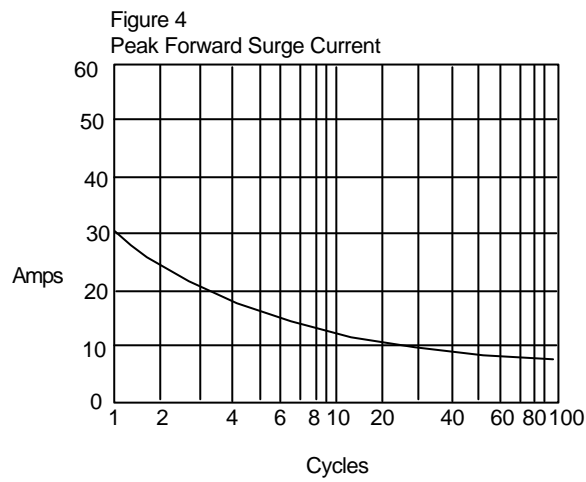
Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts



GP10A thru GP10M



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles