



**E502650**

## Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Any Mounting Position
- With Heat Sink On Top

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 2.0°C/W Junction To Case
- Thermal Resistance: 15°C/W Junction To Ambient

## Mechanical Data

- Mounting Torque: 8.0 in-lbs Maximum
- Mounting Hole For #10 Screw

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|----------------------------------------|---------------------|-----------------------------|
| GBPC25005       | GBPC25005      | 50V                                    | 35V                 | 50V                         |
| GBPC2501        | GBPC2501       | 100V                                   | 70V                 | 100V                        |
| GBPC2502        | GBPC2502       | 200V                                   | 140V                | 200V                        |
| GBPC2504        | GBPC2504       | 400V                                   | 280V                | 400V                        |
| GBPC2506        | GBPC2506       | 600V                                   | 420V                | 600V                        |
| GBPC2508        | GBPC2508       | 800V                                   | 560V                | 800V                        |
| GBPC2510        | GBPC2510       | 1000V                                  | 700V                | 1000V                       |

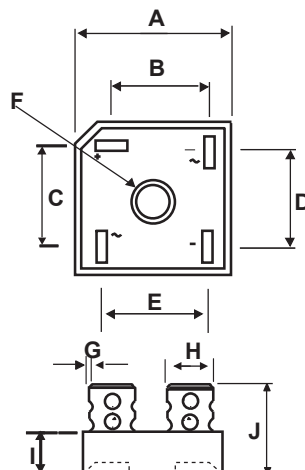
## Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |             |              |                                                             |
|---------------------------------------------------------|-------------|--------------|-------------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 25A          | $T_C = 60^\circ\text{C}$                                    |
| Peak Forward Surge Current                              | $I_{FSM}$   | 300A         | 8.3ms, Half Sine                                            |
| Maximum Forward Voltage Drop Per Element                | $V_F$       | 1.1V         | $I_{FM} = 12.5\text{A Per Element}; T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5μA<br>500μA | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$       |

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

# 25 Amp Glass Passivated Single Phase Bridge Rectifier 50 to 1000 Volts

GBPC



| DIMENSIONS |        |         |       |         |      |
|------------|--------|---------|-------|---------|------|
| DIM        | INCHES |         | MM    |         | NOTE |
|            | MIN    | MAX     | MIN   | MAX     |      |
| A          | 1.114  | 1.134   | 28.30 | 28.80   |      |
| B          | 0.634  | 0.673   | 16.10 | 17.10   |      |
| C          | 0.634  | 0.673   | 16.10 | 17.10   |      |
| D          | 0.543  | 0.583   | 13.80 | 14.80   |      |
| E          | 0.693  | 0.732   | 17.60 | 18.60   |      |
| F          | 0.197  | Nominal | 5.00  | Nominal | Φ    |
| G          | 0.030  | 0.034   | 0.76  | 0.86    |      |
| H          | 0.244  | 0.256   | 6.20  | 6.50    |      |
| I          | 0.291  | 0.335   | 7.40  | 8.50    |      |
| J          | 0.740  | 0.850   | 18.80 | 21.60   |      |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

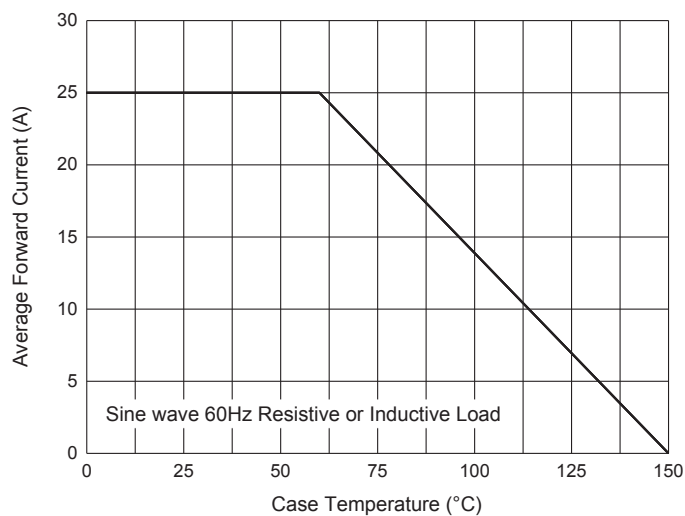


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

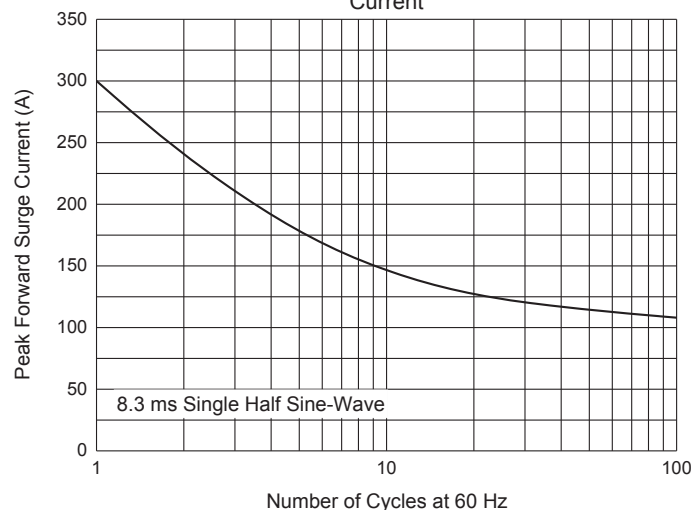


Fig. 3 - Typical Instantaneous Forward Characteristics

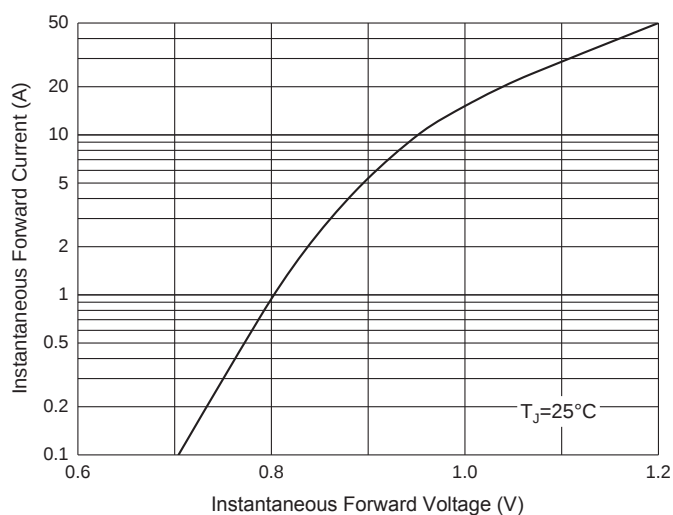
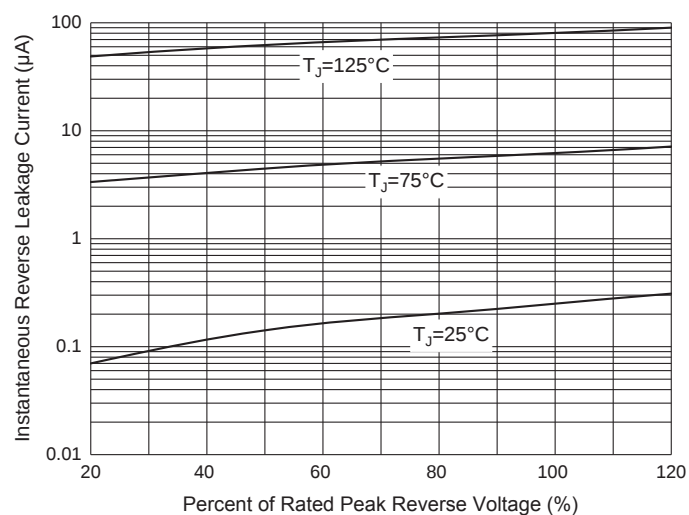


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing         |
|----------------|-----------------|
| Part Number-BP | Bulk;400Pcs/Ctn |

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

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