



Micro Commercial Components

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DB101 THRU DB107

Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- 4-PIN DIP Package
- Glass Passivated Diode Construction
- UL Recognized File # E165989
- High Surge Current Capability
 Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and Rating 1

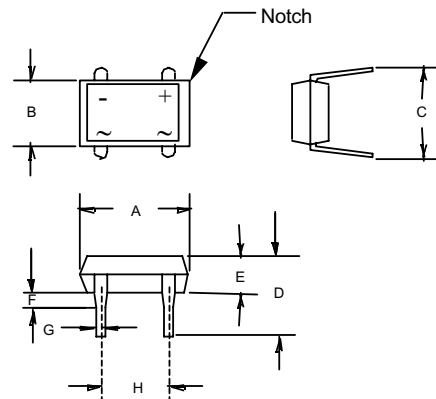
1 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

Maximum Ratings

- Operating Junction Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| DB101 | DB101 | 50V | 35V | 50V |
| DB102 | DB102 | 100V | 70V | 100V |
| DB103 | DB103 | 200V | 140V | 200V |
| DB104 | DB104 | 400V | 280V | 400V |
| DB105 | DB105 | 600V | 420V | 600V |
| DB106 | DB106 | 800V | 560V | 800V |
| DB107 | DB107 | 1000V | 700V | 1000V |

DB-1



Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|---------------|---|
| Average Forward Current | $I_{F(AV)}$ | 1 A | $T_A = 40^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 50A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.1V | $I_{FM} = 1.0\text{A}; T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10μA 0.5mA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 25pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .316 | .335 | 8.05 | 8.51 | |
| B | .245 | .255 | 6.20 | 6.50 | |
| C | .300 | .350 | 7.60 | 8.90 | |
| D | .236 | .299 | 6.01 | 7.60 | |
| E | .102 | .130 | 2.60 | 3.30 | |
| F | .060 | | 1.50 | | Typ |
| G | .016 | .022 | .41 | .56 | Typ |
| H | .195 | .205 | 5.00 | 5.20 | |

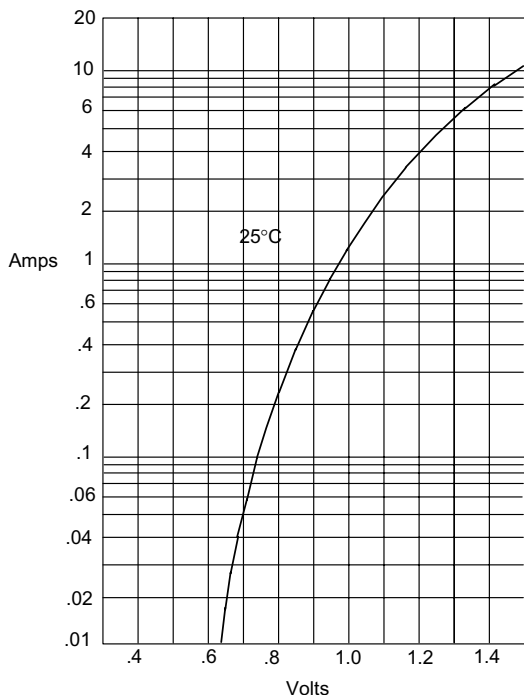
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DB101 thru DB107



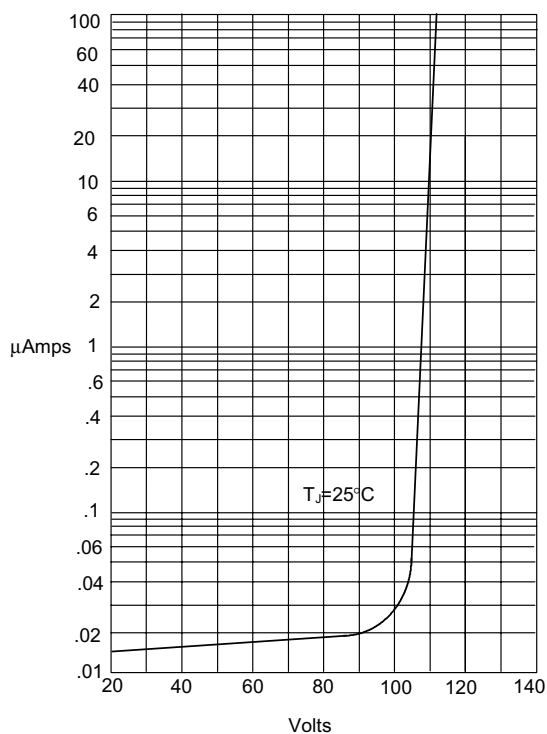
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Figure 1
Typical Forward Characteristics



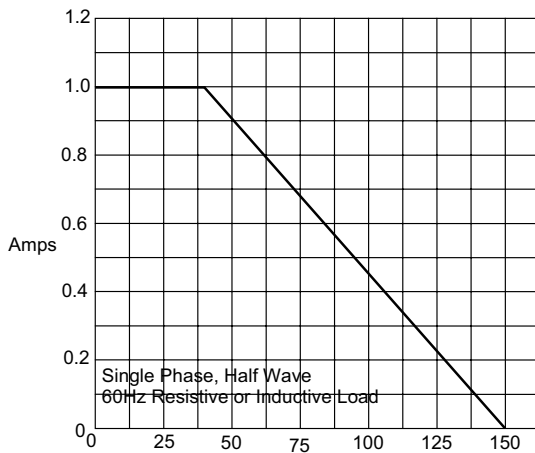
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



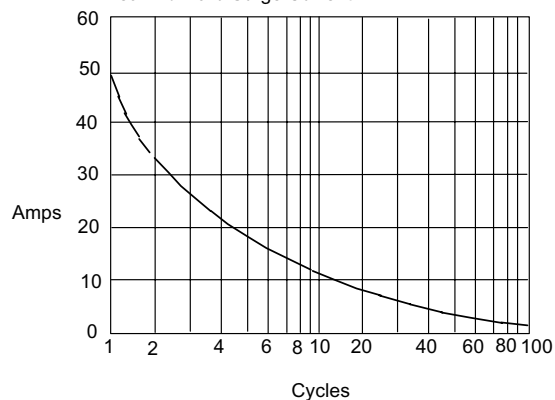
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Ambient Temperature - °C

Figure 4
Peak Forward Surge Current



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



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Ordering Information

| | |
|------------------|-----------------|
| Device | Packing |
| (Part Number)-BP | Bulk;50pcs/tube |

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