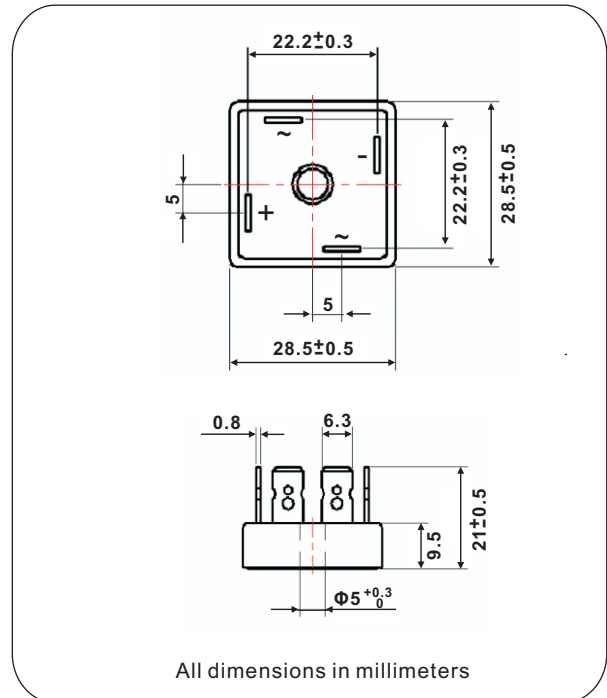
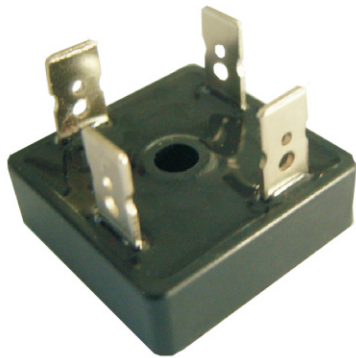




Glass Passivated Single-Phase Bridge Rectifier, 35A

36MB08 Thru 36MB16



FEATURES

- UL recognition file number E320098 
- Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- Typical IR less than 1.0 μ A
- High surge current capability
- Low thermal resistance
- Solder dip 260°C, 40s
- Compliant to RoHS 
- Glass passivated chips

TYPICAL APPLICATIONS

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

MECHANICAL DATA

Case: GBPC

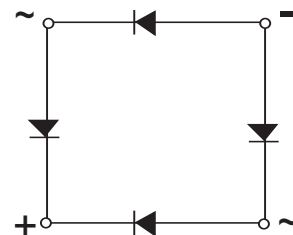
Epoxy meets UL 94 V-O flammability rating

Terminals: Nickel plated on faston lugs, solderable per J-STD-002 and JESD22-B102.

Polarity: As marked

Mounting Torque: 20 inches-lbs. max. (M5 screw)

Weight: 18g (0.63 ozs)



PRIMARY CHARACTERISTICS

| | |
|----------------------|---------------|
| $I_{F(AV)}$ | 35A |
| V_{RRM} | 800V to 1600V |
| I_{FSM} | 400A |
| I_R | 5 μ A |
| V_F | 1.1V |
| $T_{J \text{ max.}}$ | 150°C |

Nell High Power Products

| MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted) | | | | | | |
|--|----------------|------------|------|------|------|----------------------|
| PARAMETER | SYMBOL | 36MB | | | | UNIT |
| | | 08 | 10 | 12 | 16 | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 800 | 1000 | 1200 | 1600 | V |
| Maximum RSM voltage (non-repetitive peak reverse voltage) | V_{RMS} | 900 | 1100 | 1300 | 1700 | V |
| Maximum DC blocking voltage | V_{DC} | 800 | 1000 | 1200 | 1600 | V |
| Maximum average forward rectified output current (Fig. 1) | $I_{F(AV)}$ | 35 | | | | A |
| Peak forward surge current single sine-wave superimposed on rated load | I_{FSM} | 400 | | | | A |
| Rating (non-repetitive, for t greater than 1 ms and less than 8.3 ms) for fusing | I^2t | 660 | | | | A^2s |
| RMS isolation voltage from case to leads | V_{ISO} | 2500 | | | | V |
| Operating junction storage temperature range | T_J, T_{STG} | -55 to 150 | | | | $^\circ\text{C}$ |

| ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted) | | | | | | | |
|---|---------------------------|--------|------|----|----|----|---------------|
| PARAMETER | TEST CONDITIONS | SYMBOL | 36MB | | | | UNIT |
| | | | 08 | 10 | 12 | 16 | |
| Maximum instantaneous forward drop per diode | $I_F = 17.5\text{A}$ | V_F | 1.1 | | | | V |
| Maximum reverse DC current at rated DC blocking voltage per diode | $T_A = 25^\circ\text{C}$ | I_R | 5 | | | | μA |
| | $T_A = 150^\circ\text{C}$ | | 500 | | | | |
| Typical junction capacitance per diode | 4V, 1MHz | C_J | 300 | | | | pF |

| THERMAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted) | | | | | | |
|--|-----------------------|------|----|----|----|--------------------|
| PARAMETER | SYMBOL | 36MB | | | | UNIT |
| | | 08 | 10 | 12 | 16 | |
| Typical thermal resistance | $R_{\theta JC}^{(1)}$ | 1.4 | | | | $^\circ\text{C/W}$ |

Notes

- (1) With heatsink
- (2) Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with #10 screw

Fig.1 Maximum Output Rectified Current

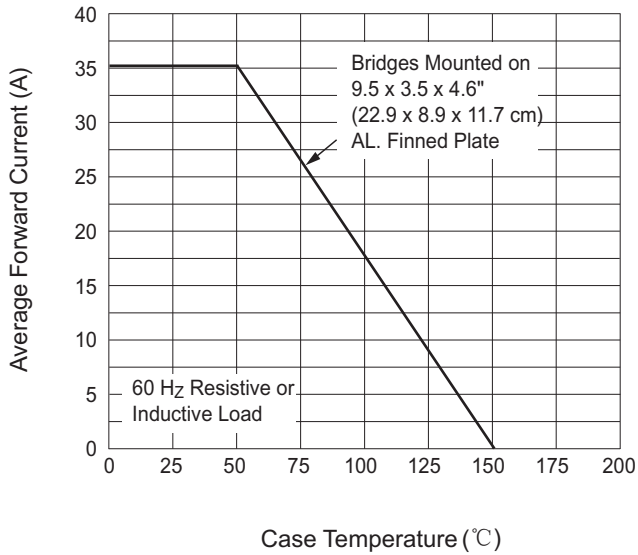


Fig.2 Maximum Output Rectified Current

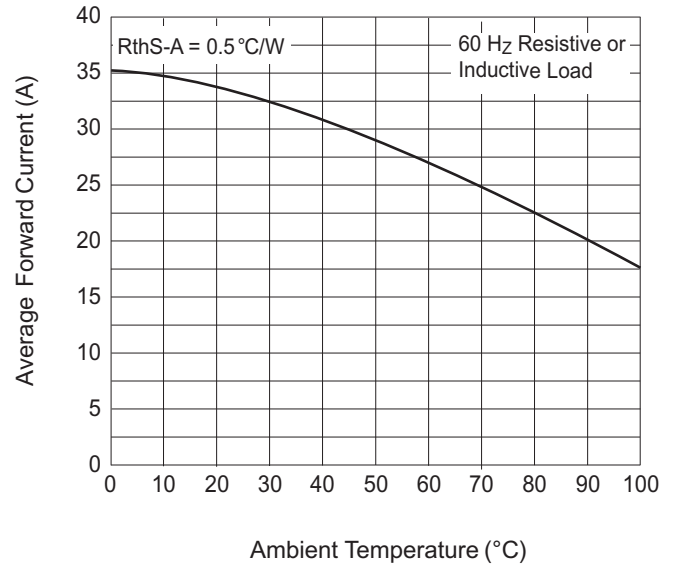


Fig.3 Maximum Power Dissipation

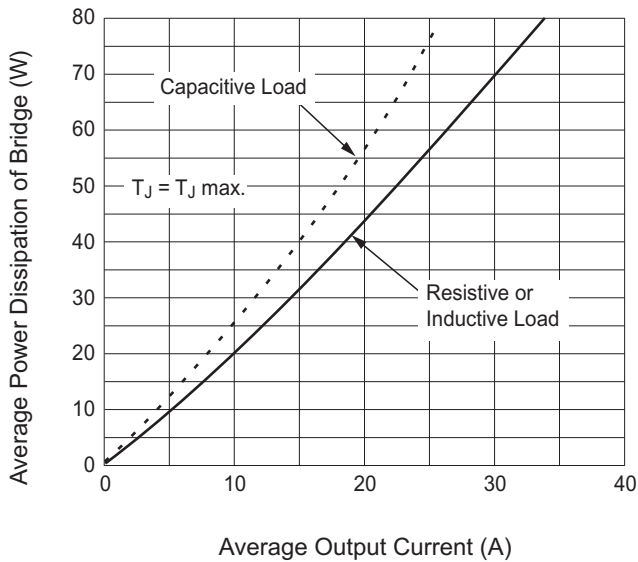


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current Per Diode

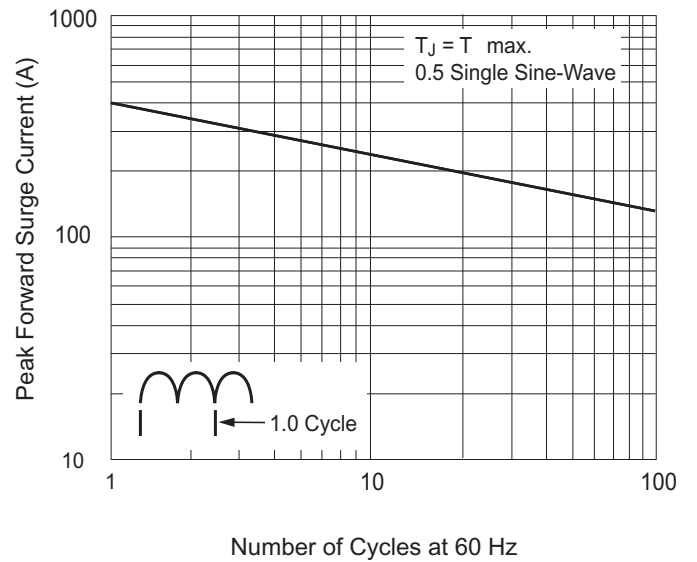


Fig.5 Typical Instantaneous Forward Characteristics Per Leg

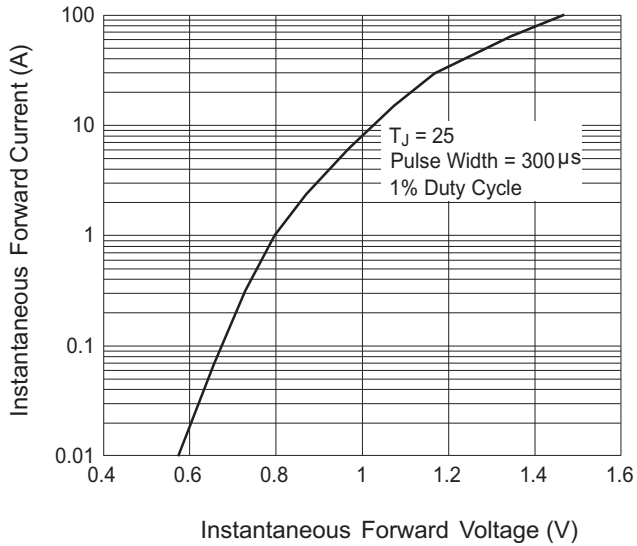


Fig.6 Typical Reverses Leakage Characteristics Per Leg

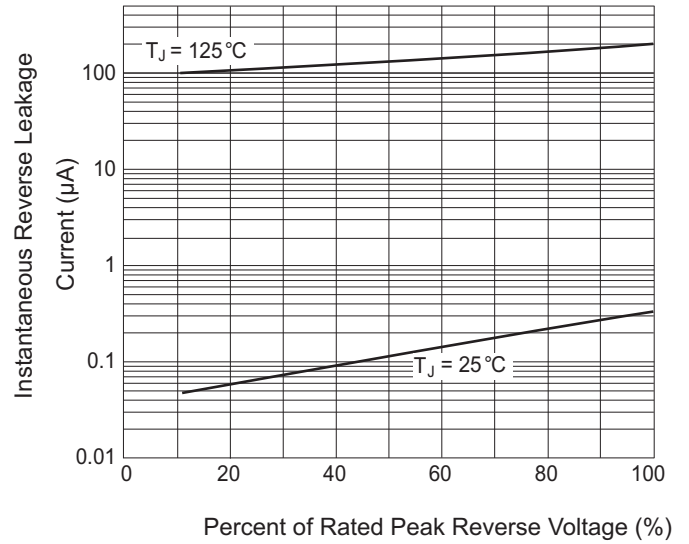


Fig.7 Typical Junction Capacitance Per Leg

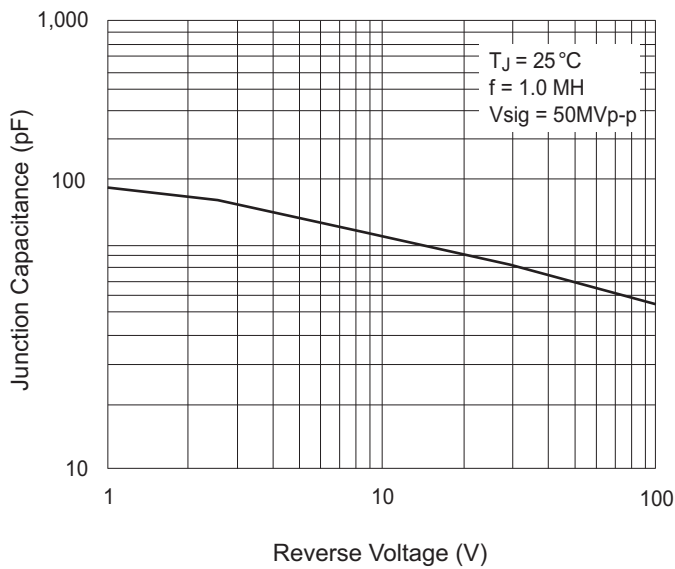


Fig.8 Typical Transient Thermal Impedance Per Leg

