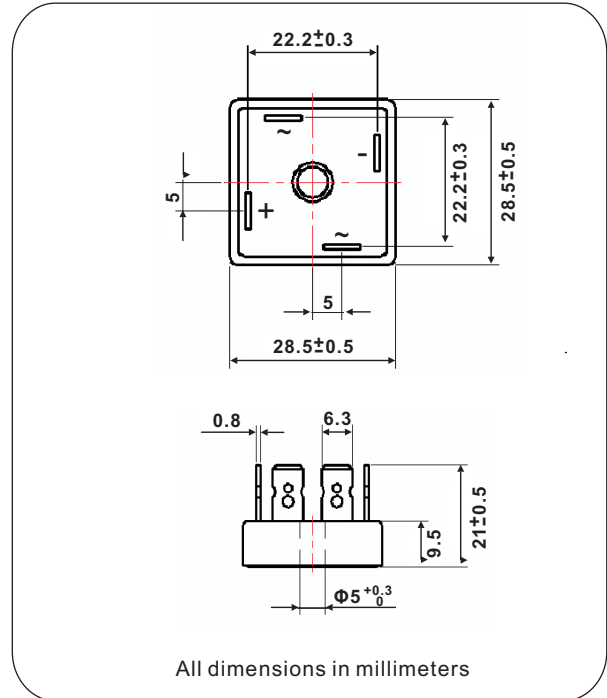
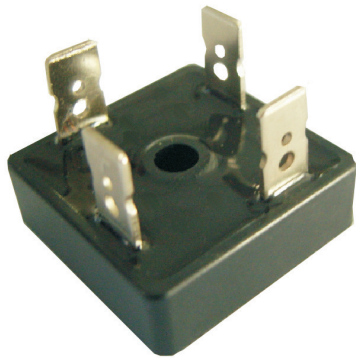




Glass Passivated Single-Phase Bridge Rectifier, 35A

36MB08 Thru 36MB16

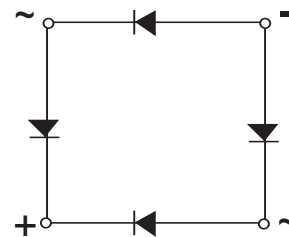


FEATURES

- 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
$T_{J \max.}$	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 ² s
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

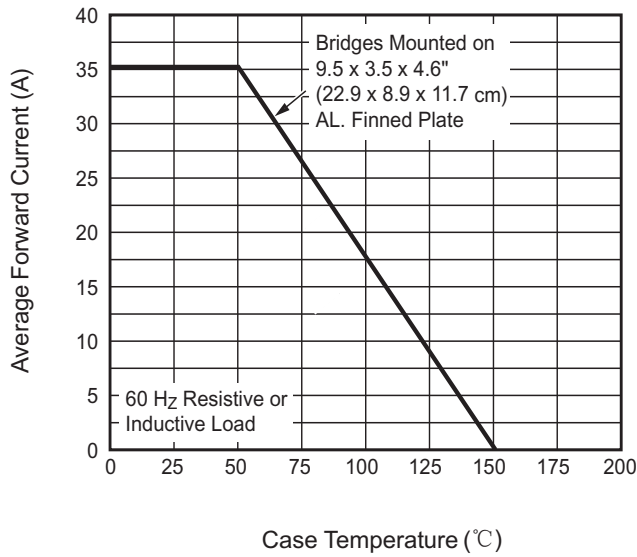


Fig.2 Maximum Output Rectified Current

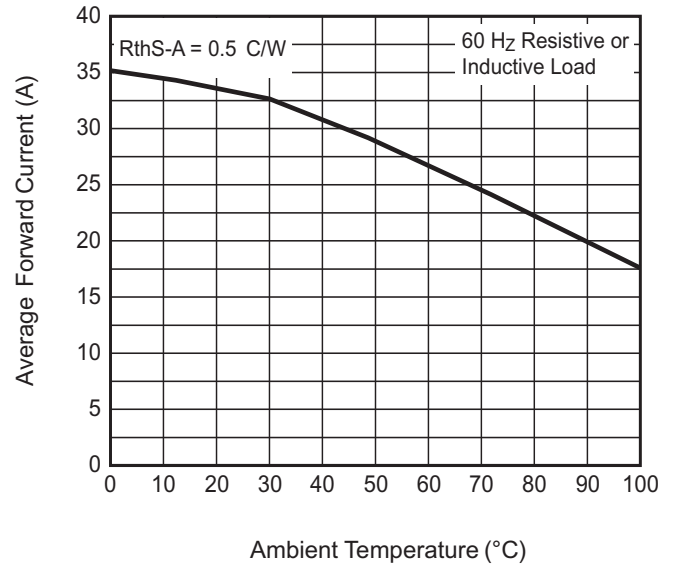


Fig.3 Maximum Power Dissipation

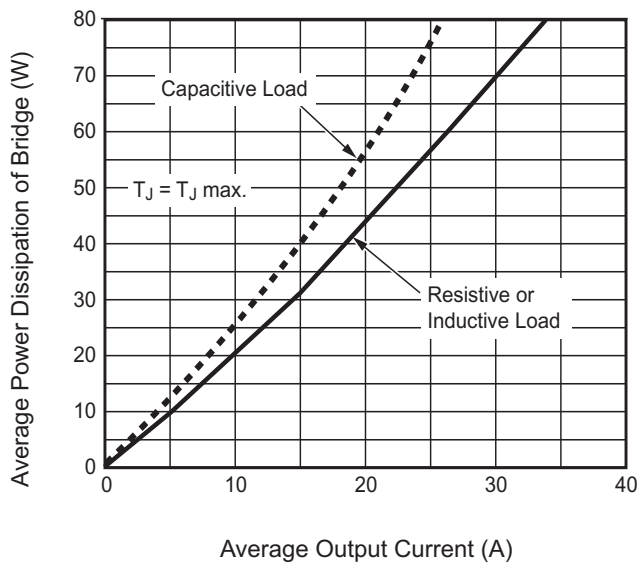


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current Per Diode

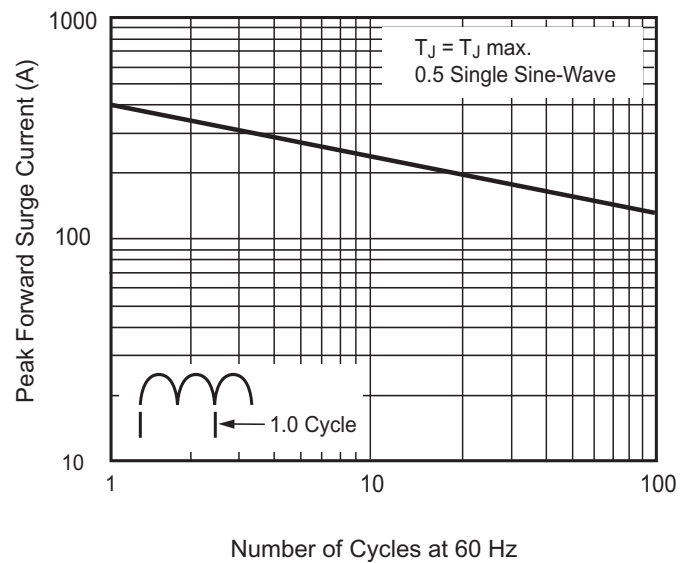


Fig.5 Typical Instantaneous Forward Characteristics Per Leg

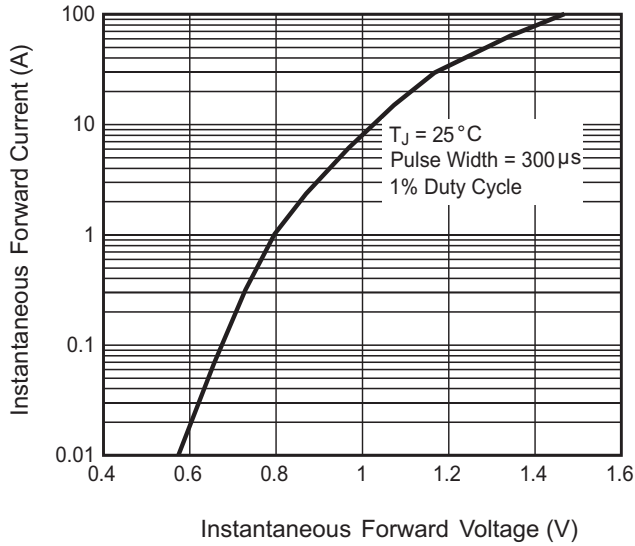


Fig.6 Typical Reverses Leakage Characteristics Per Leg

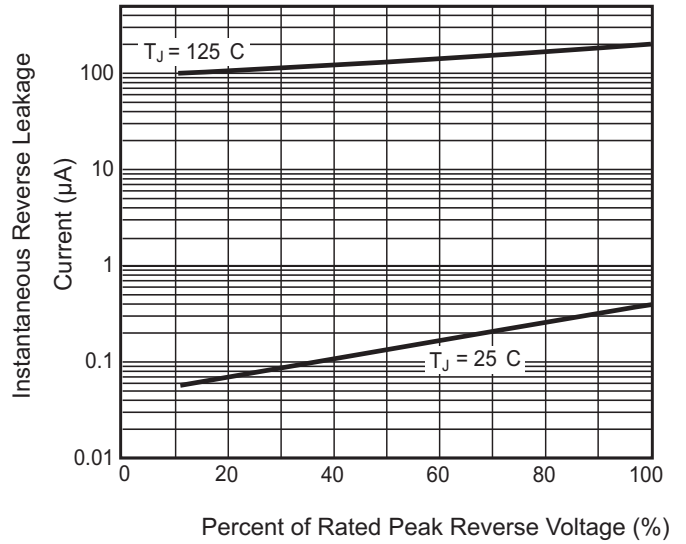


Fig.7 Typical Junction Capacitance Per Leg

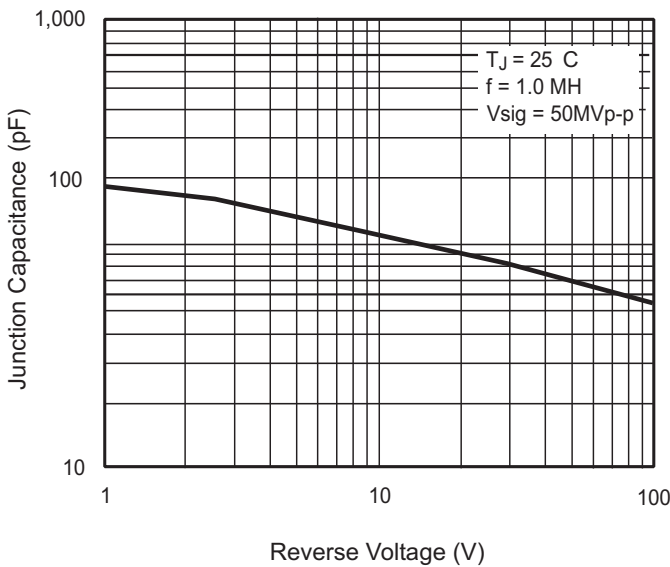


Fig.8 Typical Transient Thermal Impedance Per Leg

