

## GLASS PASSIVATED BRIDGE RECTIFIERS

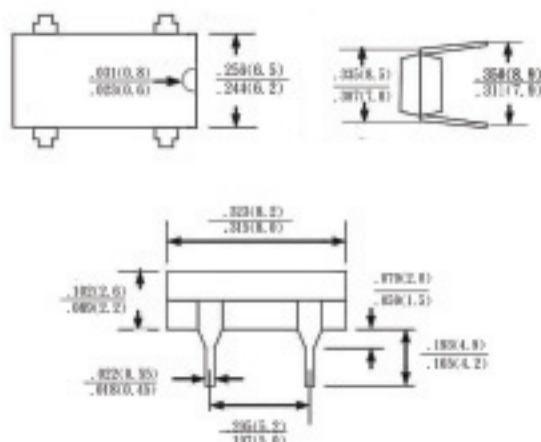
REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 1.0 Amperes

### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0

### MECHANICAL DATA

- Polarity: As marked on Body
- Weight: 0.02 ounces, 0.38 grams
- Mounting position: Any



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL		B40C	B80C	B125C	B250C	B380C	B500C	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=40^\circ\text{C}$	$I_{(AV)}$				1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC Method)	$I_{FSM}$				50				A
Maximum Forward Voltage at 1.0A DC	$V_F$				1.1				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_J=25^\circ\text{C}$ @ $T_J=125^\circ\text{C}$	$I_R$				10 500				$\mu\text{A}$
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$				10.4				$\text{A}^2\text{S}$
Typical Junction Capacitance per element (Note 1)	$C_J$				25				pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$				40				$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$				-55 to +150				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$				-55 to +150				$^\circ\text{C}$

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance from junction to ambient mounted on P.C.B.  
with 0.5 x 0.5" (13 x 13mm) copper pads.

# RATING AND CHARACTERISTIC CURVES

## B40C...500C/1000 DIL

FIG. 1 - FORWARD CURRENT DERATING CURVE

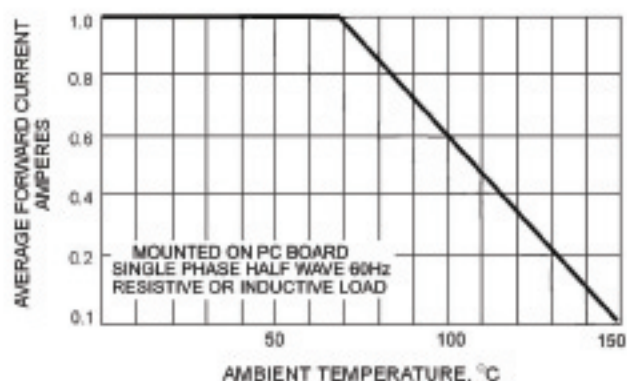


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

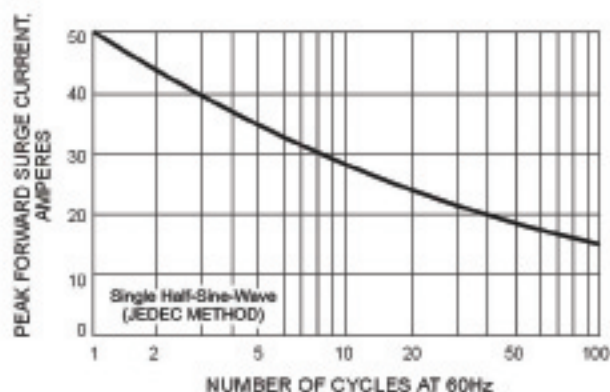


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

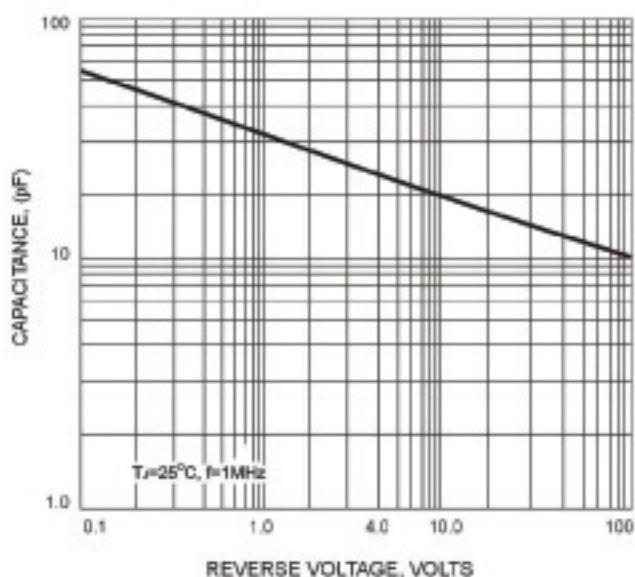


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

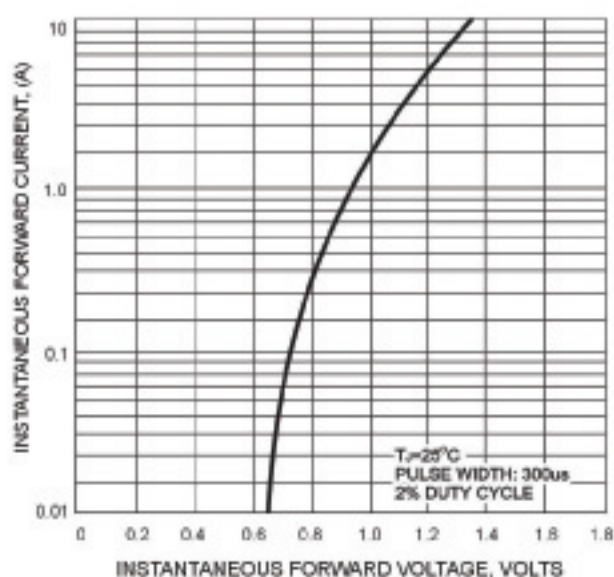


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

