VI. Bridge Rectifier

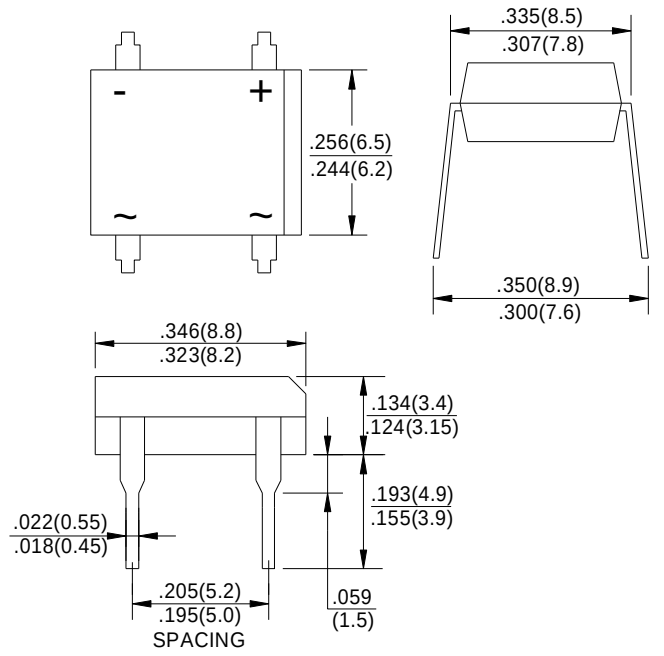
1.0A Glass Passivated Bridge Rectifier
DB101G~DB107G (Package: DB)

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
- The plastic material has Underwriters Laboratory Flammability Classification 94V-0

MECHANICAL DATA

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



Case: DB
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	DB 101G	DB 102G	DB 103G	DB 104G	DB 105G	DB 106G	DB 107G	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current @ Ta = 40℃	Io	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							Amps
Maximum forward voltage at 1.0A DC	V_F	1.1							Volts
Maximum DC reverse current @ Tj=25℃ at rated DC blocking voltage @ Tj=125℃	I_R	10 500							μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	10.4							A^2s
Typical junction capacitance per element (Note 1)	Cj	25							PF
Typical thermal resistance (Note 2)	Rth-JA	40							℃ / W
Operating temperature range	Tj	-55 to +150							℃
Storage temperature range	Tstg	-55 to +150							℃

Note:
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*0.5" (13*13mm) copper pads

Ratings and Characteristic Curves of DB101G~DB107G

FIG.1-FORWARD CURRENT DERATING CURVE

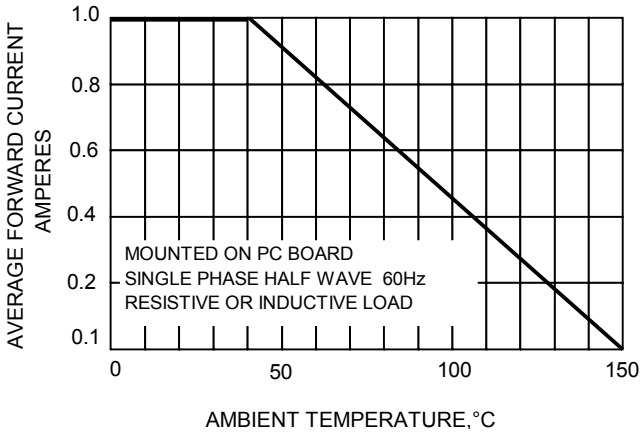


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

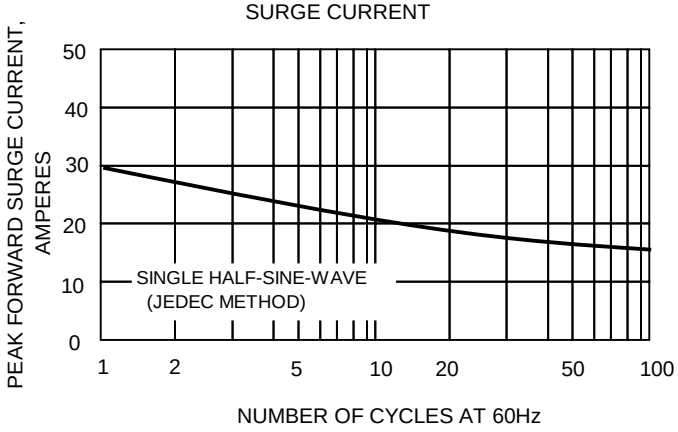


FIG.3-TYPICAL JUNCTION CAPACITANCE

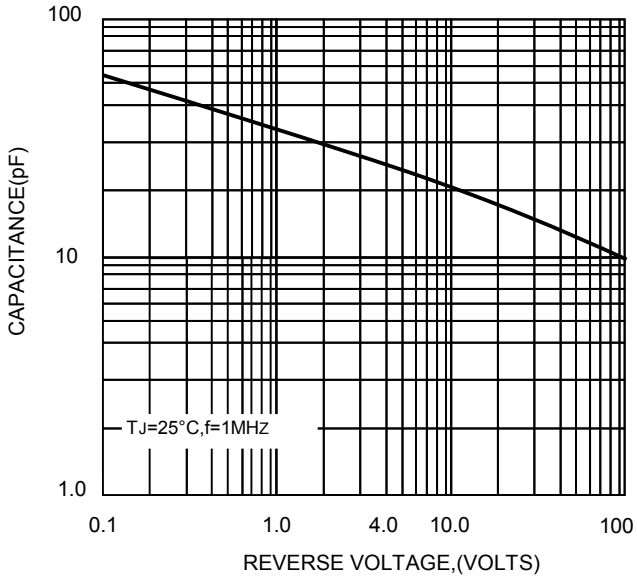


FIG.4-TYPICAL FORWARD CHARACTERISTICS

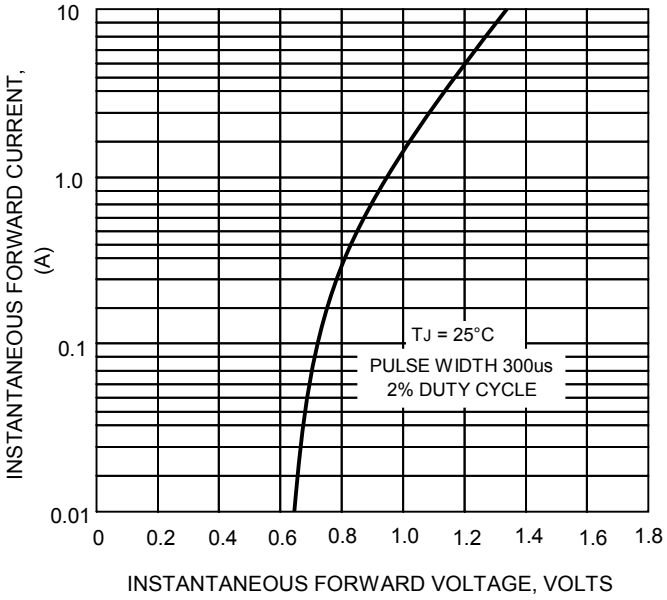


FIG.5-TYPICAL REVERSE CHARACTERISTICS