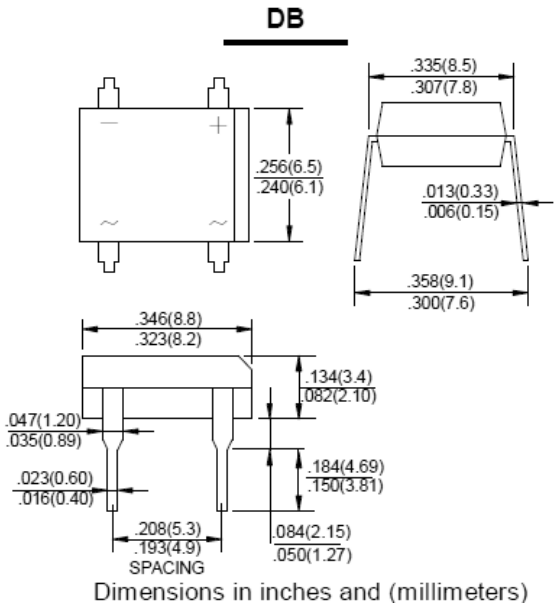
DB101G~DB107G

Single-Phase Glass Passivated Silicon Bridge Rectifier

Reverse Voltage - 50 to 1000 V
Forward Current - 1 A



Dimensions in inches and (millimeters)

Features

- Glass passivated chip junction
- Ideal for printed circuit board
- Low forward voltage drop,high current capability

Mechanical Data

- Case: Molded plastic, DB
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026
- Mounting position: Any

Absolute Maximum Ratings and Characteristics

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

Parameter	Symbols	DB101G	DB102G	DB103G	DB104G	DB105G	DB106G	DB107G	Units
	Marking	DB101G	DB102G	DB103G	DB104G	DB105G	DB106G	DB107G	-
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 at T_a = 40℃	$I_{(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half-sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage at 1 A	V_F	1.1							V
Maximum Reverse Current at Rated DC Blocking Voltage at T_j = 25℃ at T_j = 125℃	I_R	10 500							μA
I^2t Rating for Fusing (t < 8.3 ms)	I^2t	10.4							A^2s
Typical Junction Capacitance [1]	C_J	25							pF
Typical Thermal Resistance [2]	$R_{\theta JA}$	40							℃/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150							℃

[1] Measured at 1 MHz and applied reverse voltage of 4 V.

[2] Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5 X 0.5" (13 X 13 mm) copper pads.

Dated: 24/05/2021 SS Rev: 02

Electrical characteristic curves

FIG.1-FORWARD CURRENT DERATING CURVE

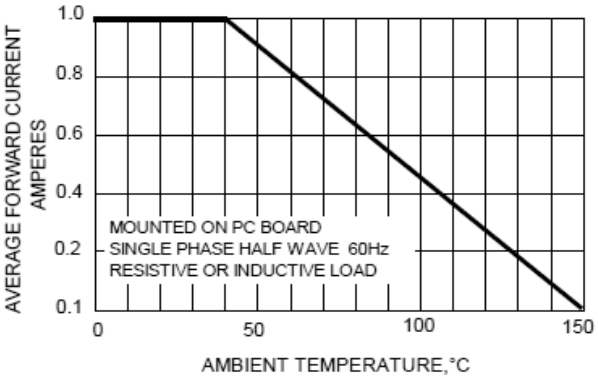


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

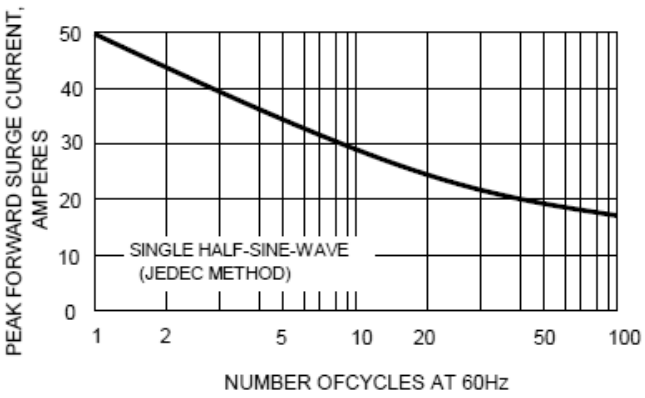


FIG.3-TYPICAL JUNCTION CAPACITANCE

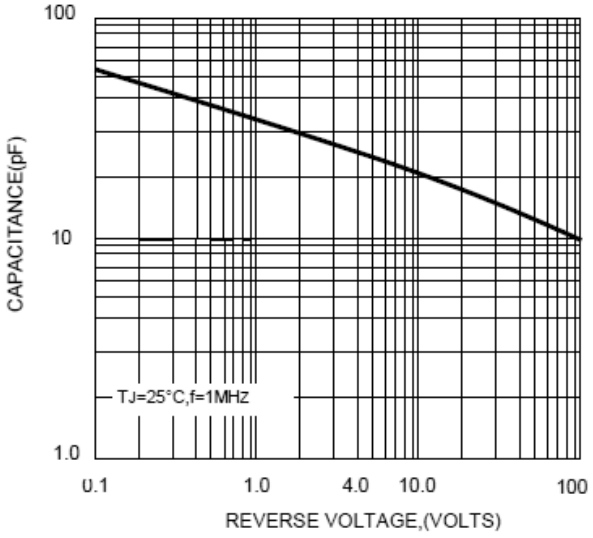


FIG.4-TYPICAL FORWARD CHARACTERISTICS

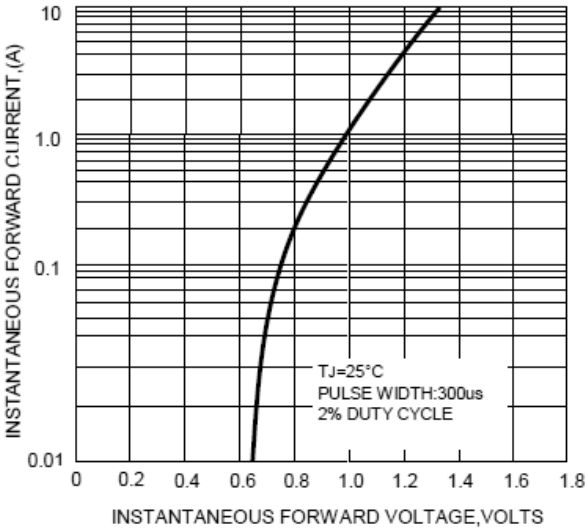


FIG.5-TYPICAL REVERSE CHARACTERISTICS