

DBS101G - DBS107G

Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers



Features

- ◇ UL Recognized file # E-96005
- ◇ Glass passivated junction
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique
- ◇ High surge current capability
- ◇ Small size, simple installation
- ◇ Green compound with suffix "G" on packing code & prefix "G" on datecode.
- ◇ DBS107G ESD Capability > 6KV.

Mechanical Data

- ◇ High temperature soldering guaranteed:
260°C/ 10 seconds.
- ◇ 5 lbs., (2.3 kg) tension
- ◇ Case : Molded plastic body
- ◇ Terminal : Pure tin plated , Lead free. Leads solderable per MIL-STD-202 Method 208
- ◇ Mounting position : as Marking

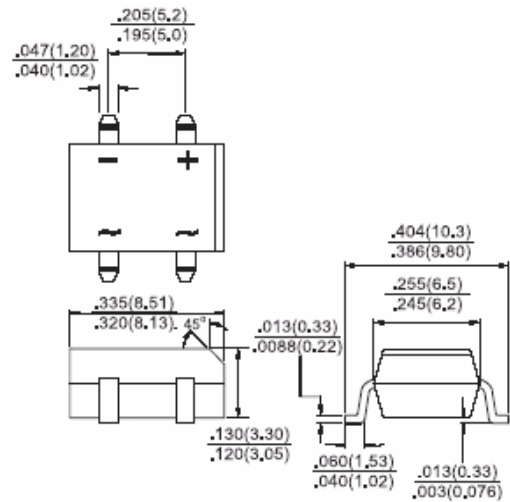
Maximum Ratings and Electrical Characteristics

Rating 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%

Type Number	Symbol	DBS 101G	DBS 102G	DBS 103G	DBS 104G	DBS 105G	DBS 106G	DBS 107G	Units
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 @ $T_A = 40^\circ C$	$I_{(AV)}$	1							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage @ 1.0A	V_F	1.1							V
Maximum DC Reverse Current @ $T_A=25^\circ C$ at Rated DC Blocking Voltage @ $T_A=125^\circ C$	I_R	10 500							μA
Typical Thermal Resistance (Note)	$R\theta_{JA}$ $R\theta_{JC}$ $R\theta_{JL}$	40 15 15							$^\circ C/W$
Operating Temperature Range	T_J	-55 to +150							$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ C$

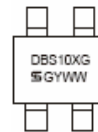
Note: Thermal Resistance from Junction to Ambient and from Junction to Lead and from Junction to Case, Mounted on P.C.B. with 0.2" x 0.2" (5mm x 5mm) Copper Pads.

DBS



Dimensions in inches and (millimeters)

Marking Diagram



DBS10XG = Specific Device Code
G = Green Compound
Y = Year
WW = Work Week

Rating and Sharacteristic Curves (DBS101G Thru DBS107G)

FIG 1 Maximum Derating Curve for Output Rectified Current

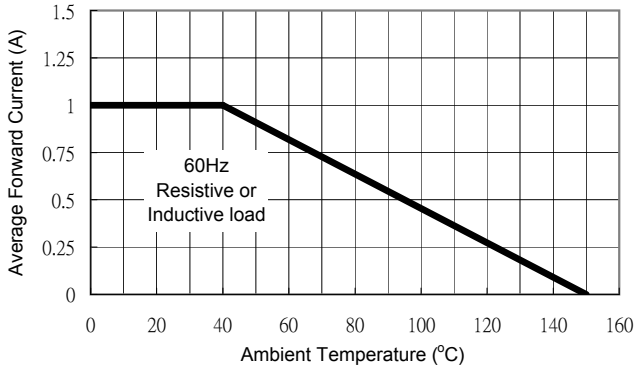


FIG 2 Maximum Non-Repetitive Peak Forward Surge Current

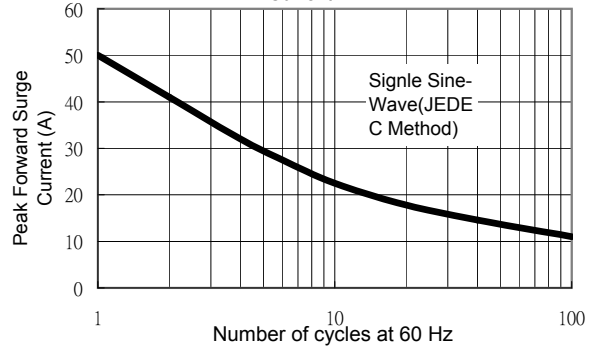


FIG 3 Typical Reverse Characteristics per Leg

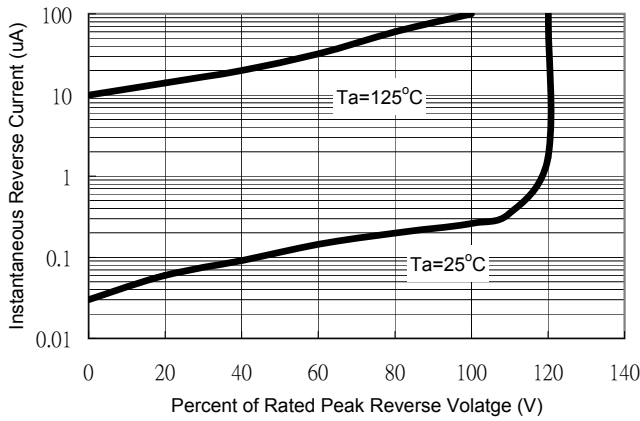


FIG 4 Typical Forward Characteristics per Bridge Element

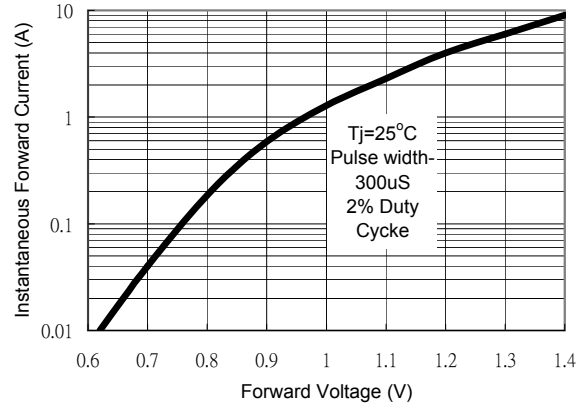


FIG 5 Typical Junction Capacitance

