



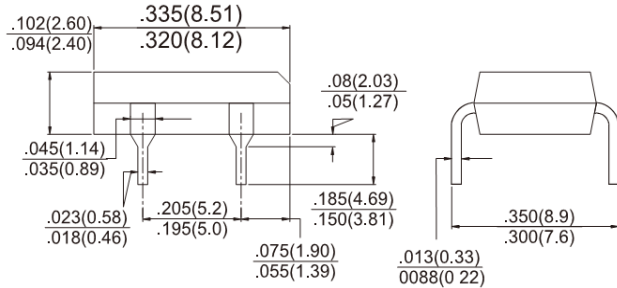
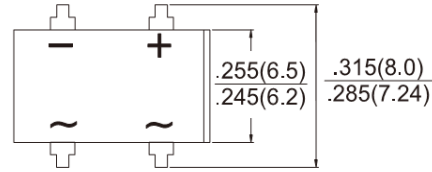
HDBL101G - HDBL107G

1.0AMP. Glass Passivated High Efficient Bridge Rectifiers

DBL

Features

- ✧ UL Recognized File # E-326854
- ✧ Glass passivated junction
- ✧ Ideal for printed circuit board
- ✧ Reliable low cost construction utilizing molded plastic technique
- ✧ High temperature soldering guaranteed:
260°C / 10 seconds / 0.375"(9.5mm)
lead length at 5lbs., (2.3kg) tension
- ✧ High surge current capability
- ✧ Green compound with suffix "G" on packing
code & prefix "G" on datecode



Mechanical Data

- ✧ Case: Molded plastic
- ✧ Terminals: Pure tin plated, lead free, solderable
per MIL-STD-202, Method 208
- ✧ Weight: 0.368 grams

Dimensions in inches and (millimeters)

Marking Diagram



- | | |
|-----|------------------------|
| P/N | = Specific Device Code |
| G | = Green Compound |
| Y | = Year |
| WW | = Work Week |

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	HDBL 101G	HDBL 102G	HDBL 103G	HDBL 104G	HDBL 105G	HDBL 106G	HDBL 107G	Unit
Maximum Repetitive 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	I _{F(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 (Note 1) @1 A	V _F	1.0			1.3	1.7			V
Maximum DC Reverse Current @T _A =25℃ at Rated DC Block Voltage @ T _A =125 ℃	I _R	5 500							uA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	50				75			nS
Typical Thermal Resistance	R _{θJA} R _{θJL}	40 15							°C/W
Operating Temperature Range	T _J	- 55 to + 150							°C
Storage Temperature Range	T _{STG}	- 55 to + 150							°C

Notes 1: Pulse Test with PW=300 usec, 1% Duty Cycle

Notes 2: Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{RR}=0.25A$

RATINGS AND CHARACTERISTIC CURVES (HDBL101G THRU HDBL107G)

FIG.1 FORWARD CURRENT DERATING CURVE

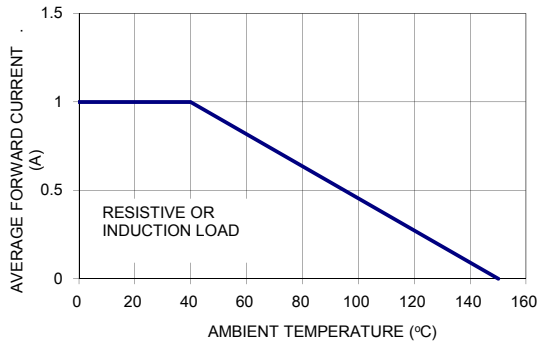


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

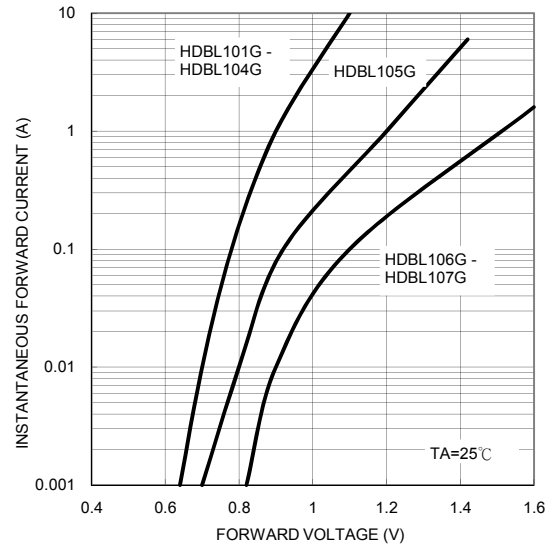


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

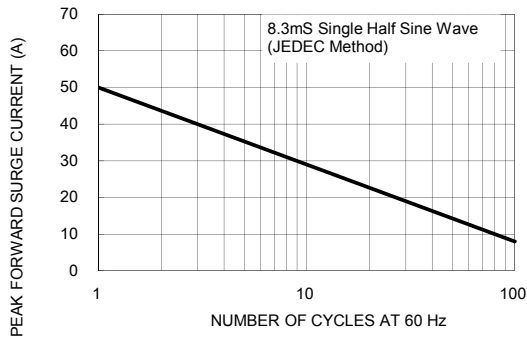


FIG. 4 TYPICAL JUNCTION CAPACITANCE

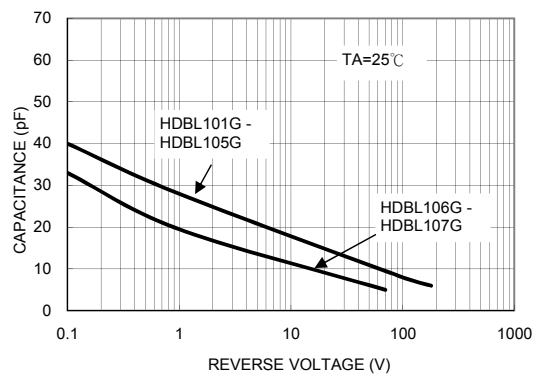


FIG. 5 TYPICAL REVERSE CHARACTERISTICS

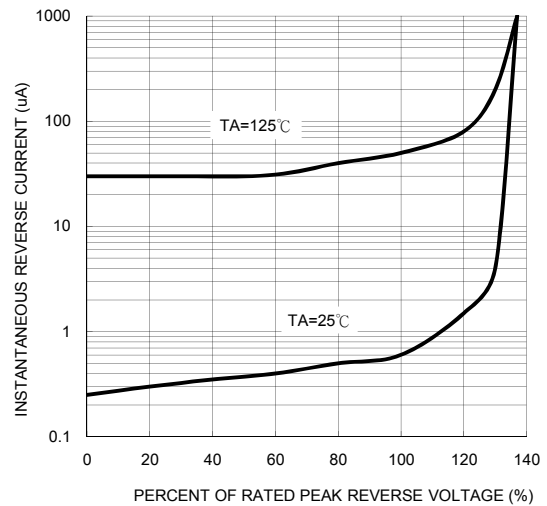


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

