

HDBS101G- HDBS107G

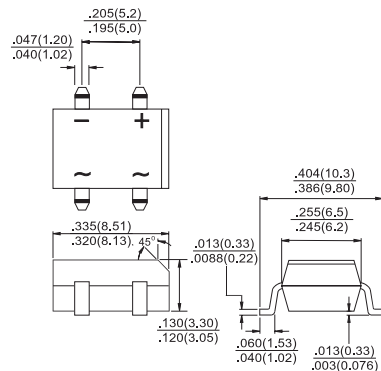
1.0 AMP. Glass Passivated
Bridge High Efficient Rectifiers

DBS



Features

- ✧ UL Recognized File # E-96005
- ✧ 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 5 lbs., (2.3 kg) tension
- ✧ Small size, simple installation
Leads solderable per MIL-STD-202, Method 208
- ✧ High surge current capability
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.



Dimensions in inches and (millimeters)

Marking Diagram



HDBS10XG = 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	HDBS 101G	HDBS 102G	HDBS 103G	HDBS 104G	HDBS 105G	HDBS 106G	HDBS 107G	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _A = 40 °C	I(AV)	1.0							A
Peak Forward Surge Current, 8,3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	50							A
Maximum Instantaneous Forward Voltage @ 1.0A	V _F	1.0			1.3	1.7			V
Maximum DC Reverse Current @ T _A =25°C at Rated DC Blocking Voltage @ T _A =125°C	I _R	5.0 500							uA uA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	50				75			nS
Typical Thermal Resistance (Note 3)	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. DBS for Surface Mount Package.

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

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

Version: B08

RATINGS AND CHARACTERISTIC CURVES (HDBS101G THRU HDBS107G)

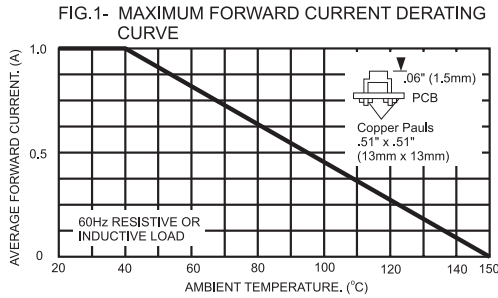


FIG.2- TYPICAL FORWARD CHARACTERISTICS

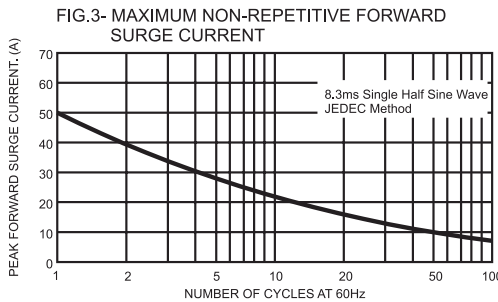
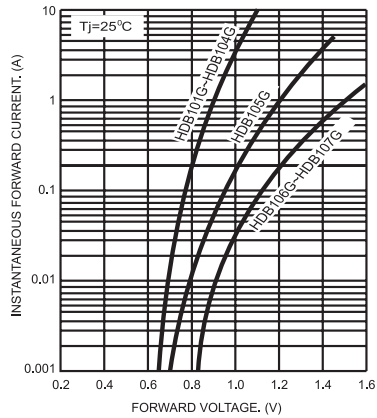


FIG.5- TYPICAL REVERSE CHARACTERISTICS

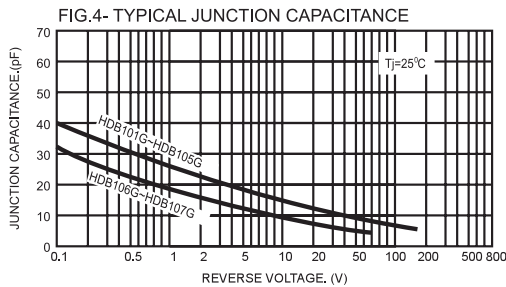
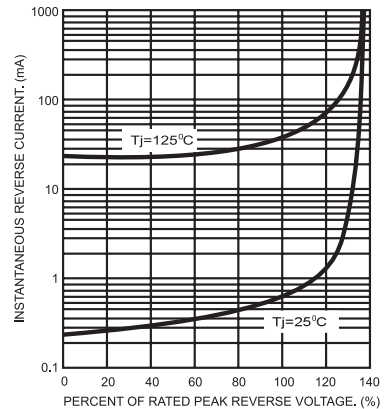


FIG.6- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

