



HDB101G THRU HDB107G

1.0 AMP. Glass Passivated Bridge High Efficient Rectifiers



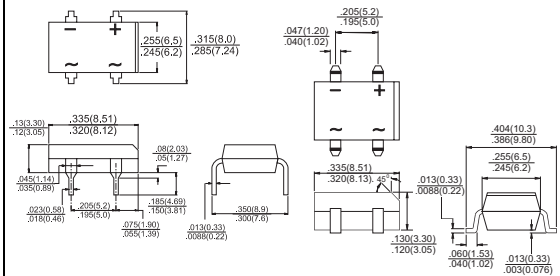
Voltage Range
50 to 1000 Volts
Current
1.0 Ampere

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

DB

DBS



Dimensions in inches and (millimeters)

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	HDB 101G	HDB 102G	HDB 103G	HDB 104G	HDB 105G	HDB 106G	HDB 107G	Units
		HDB S 101G	HDBS 102G	HDBS 103G	HDBS 104G	HDBS 105G	HDBS 106G	HDBS 107G	
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℃	I _(AV)	1.0							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	1.0			1.3	1.7			V
Maximum DC Reverse Current @ T _A =25℃ at Rated DC Blocking Voltage @ T _A =125℃	I _R	5.0 500							uA uA
Maximum Reverse Recovery Time(Note 2)	T _{rr}	50				75			nS
Typical Thermal Resistance (Note 3)	RθJA RθJL	40 15							℃/W
Operating Temperature Range	T _j	-55 to +150							℃
Storage Temperature Range	T _{STG}	-55 to +150							℃

Notes: 1. DBS for Surface Mount Package.

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

3. Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47 x 0.47" (12 x 12mm) Copper Pads.

RATINGS AND CHARACTERISTIC CURVES (HDB101G THRU HDB107G)

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

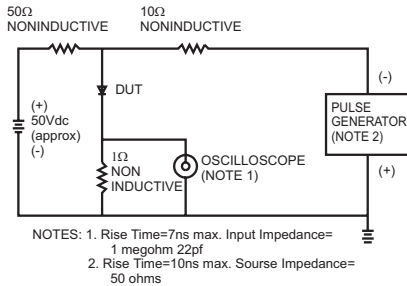


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE

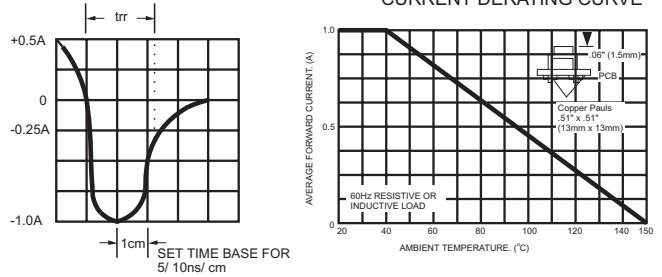


FIG.3- TYPICAL REVERSE CHARACTERISTICS

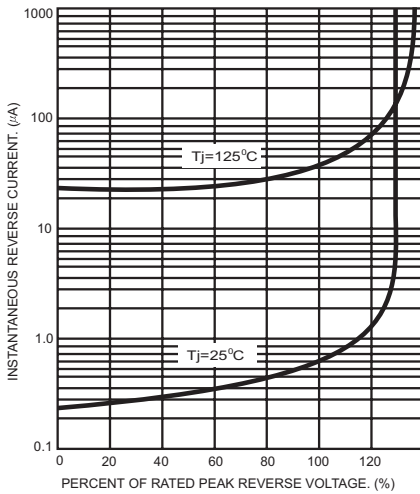


FIG.4- TYPICAL FORWARD CHARACTERISTICS

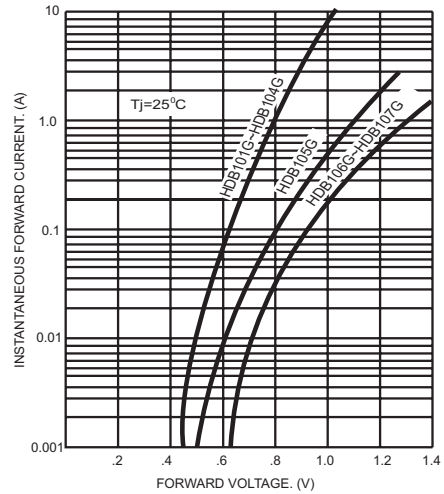


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

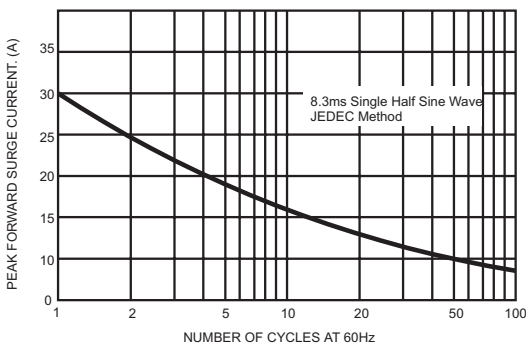


FIG.6- TYPICAL JUNCTION CAPACITANCE

