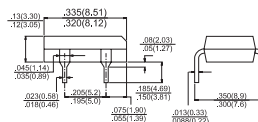
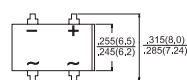


# HDB(S)101G - HDB(S)107G

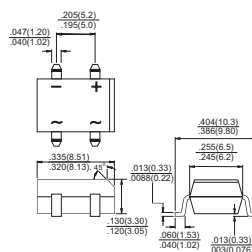
1.0 AMP. Glass Passivated  
Bridge High Efficient Rectifiers



## DB



## DBS



Dimensions in inches and (millimeters)

## 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

## Maximum Ratings and Electrical Characteristics

Rating at 25 °C ambient temperature unless otherwise specified.

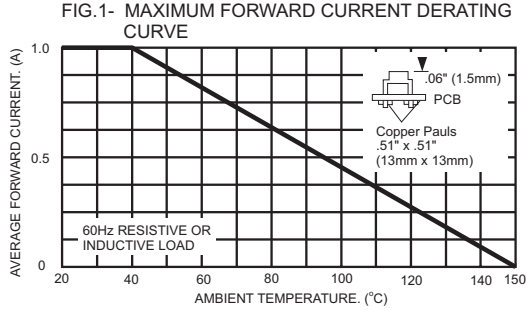
Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

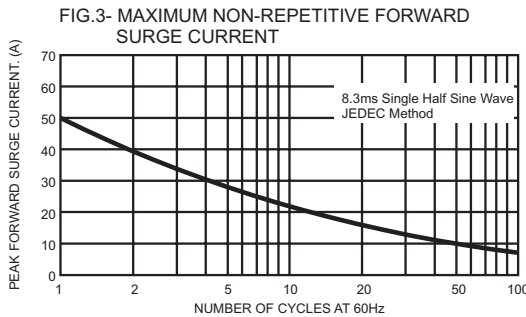
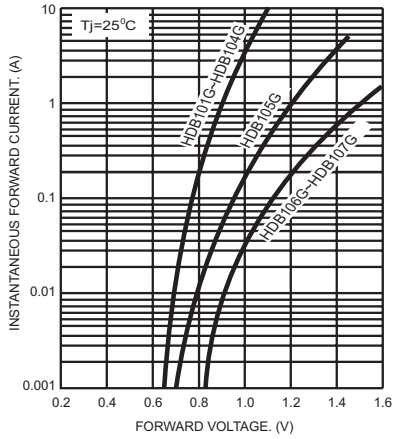
Type Number	Symbol	HDB	HDB	HDB	HDB	HDB	HDB	HDB	Units	
		101G	102G	103G	104G	105G	106G	107G		
		HDBS	HDBS	HDBS	HDBS	HDBS	HDBS	HDBS		
		101G	102G	103G	104G	105G	106G	107G		
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V	
Maximum Average Forward Rectified Current @ $T_A = 40^\circ\text{C}$	$I_{(AV)}$	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 @ $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$				5.0				$\mu\text{A}$ $\mu\text{A}$	
Maximum Reverse Recovery Time ( Note 2 )	$T_{rr}$	50				75			nS	
Typical Thermal Resistance ( Note 3 )	$R_{\theta JA}$ $R_{\theta JL}$					40				$^\circ\text{C/W}$
						15				
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$	

- 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 0.2" x 0.2" (5 x 5mm) Copper Pads

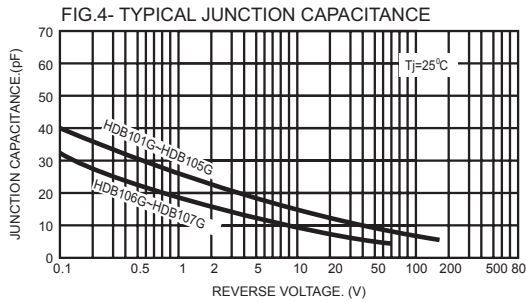
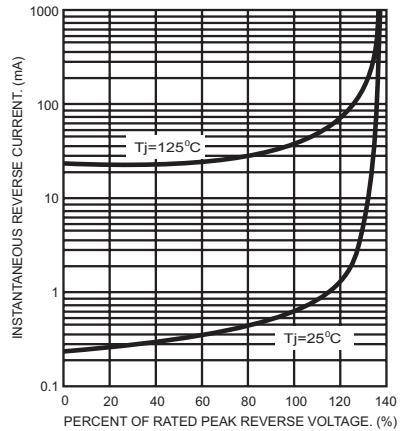
**RATINGS AND CHARACTERISTIC CURVES (HDB(S)101G THRU HDB(S)107G)**



**FIG.2- TYPICAL FORWARD CHARACTERISTICS**



**FIG.5- TYPICAL REVERSE CHARACTERISTICS**



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

