

## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### Features

- ◆ Surface mount bridge, small package;
- ◆ Ideal for printed circuit boards;
- ◆ Glass passivated chip junction;
- ◆ High forward current capability up to 4.0A;
- ◆ High surge current capability;
- ◆ High heat dissipation capability;
- ◆ Low profile package;
- ◆ Low forward voltage drop;
- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0;

### Mechanical Data

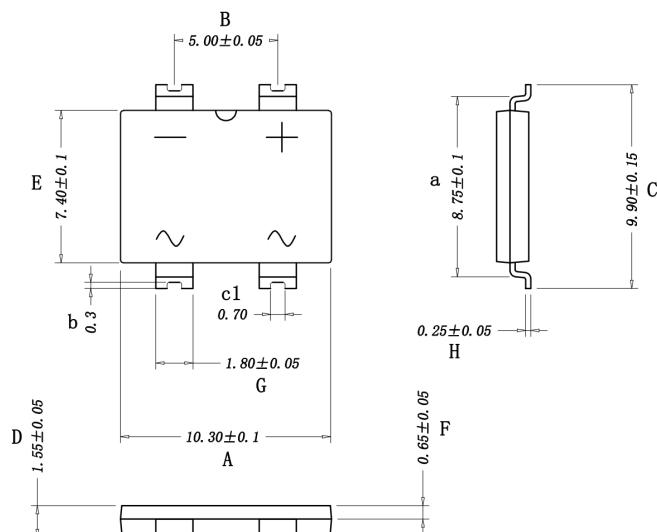
**Case :** JEDEC HBS Molded plastic body

**Mounting Position :** Any

**High temperature soldering guaranteed:** Solder Reflow 260°C, 10 seconds

**Polarity:** As marked on body

**HBS**



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

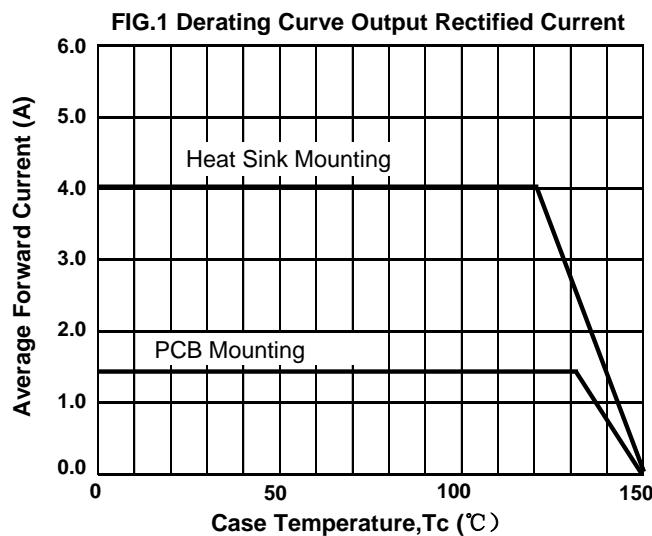
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

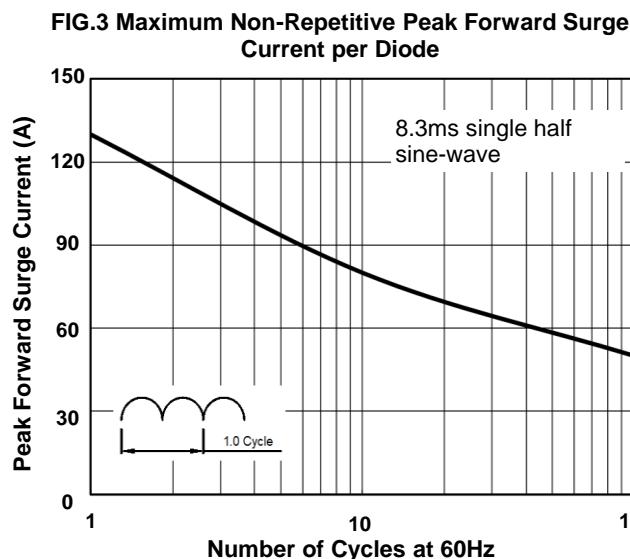
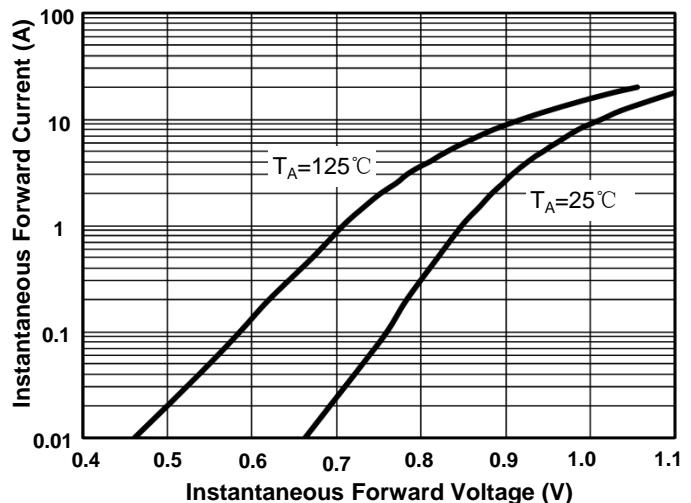
Parameter	SYMBOLS	MDD HBS402	MDD HBS404	MDD HBS406	MDD HBS408	MDD HBS410	UNITS
Marking Code							
Maximum repetitive peak reverse voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current at $T_A=25^\circ C$	$I_{F(AV)}$			4.0			A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$			120			A
Maximum instantaneous forward voltage drop per diode at 4A	$V_F$			1.10			V
Maximum DC reverse current $T_A=25^\circ C$ $T_A=125^\circ C$	$I_R$			5 100			$\mu A$
Typical capacitance (note1)	$C_J$			33			pF
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$			67 7 11			$^\circ C/W$
Operating junction and Storage Temperature Range	$T_J, T_{STG}$			-55 to +150			$^\circ C$

Note1: Measured at 1.0MHz and applied reverse voltage of 5.0V DC;

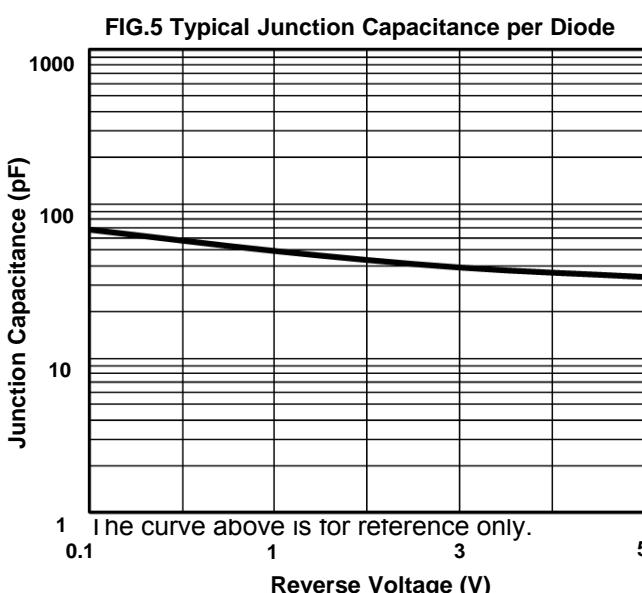
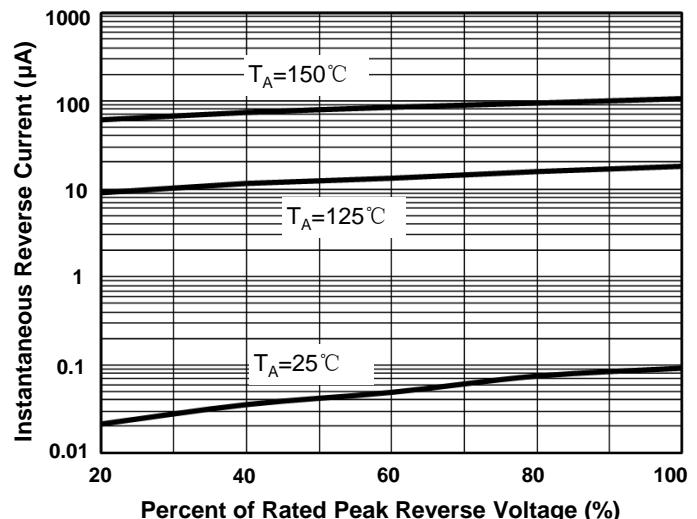
## Ratings And Characteristic Curves



**FIG.2 Typical Forward Characteristics per Diode**



**FIG.4 Typical Reverse Characteristics per Diode**





**HBS402 THRU HBS410**

**Voltage Range - 200 to 1000 Volts Current - 4.0 Ampere**

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## **Important Notice and Disclaimer**

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