

4.0A Single-Phase GLass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 V

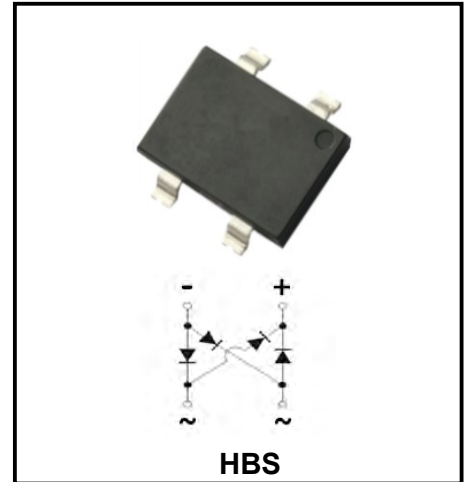
Forward Current - 4.0 A

FEATURES

- ◆ Glass passivated junction
- ◆ The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- ◆ Surge overload ratings to 120 amperes peak
- ◆ Ideal for printed circuit board application
- ◆ High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

MECHANICAL DATA

- ◆ Case:HBS
- ◆ Terminals:Platde leads solderable per MIL-STD-750, Method 2026
- ◆ Polarity:Polarity symbols molded or Marked on body
- ◆ Mounting Position:Any
- ◆ Weight:0.015ounce,0.38 grams(approx)



Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified,Resistive or inductive load,60HZ. For Capacitive load derate current by 20%

Parameter	Symbol	HBS4005	HBS401	HBS402	HBS404	HBS406	HBS408	HBS410	unit	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V	
Maximum RMS bridge input 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 output current at $T_A=40^\circ C$	$I_{F(AV)}$	4.0							A	
Max Instantaneous forward voltage drop per diode $I_F=1.0A$ $I_F=2.0A$ $I_F=4.0A$	V_F	0.89 0.93 0.98							V	
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	120							A	
Maximum DC reverse current at ratde DC blocking voltage per element $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	5 100							μA	
Rating for fusing($t<8.3ms$)	I^2t	59.8							A^2s	
Thermal resistance	Between Junction and Ambient	$R_{\theta JA}$	55							$^\circ C/W$
	Between Junction and Lead	$R_{\theta JL}$	10							
	Between Junction and Case	$R_{\theta JC}$	6							
Operating Junction Temperature Range	T_j	-55 ~ +150							$^\circ C$	
Storage Temperature Range	T_{stg}	-55 ~ +150							$^\circ C$	

Rating and Characteristic Curves

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

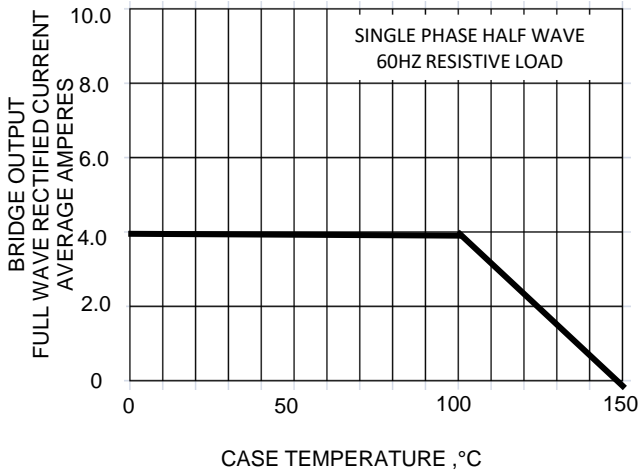


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

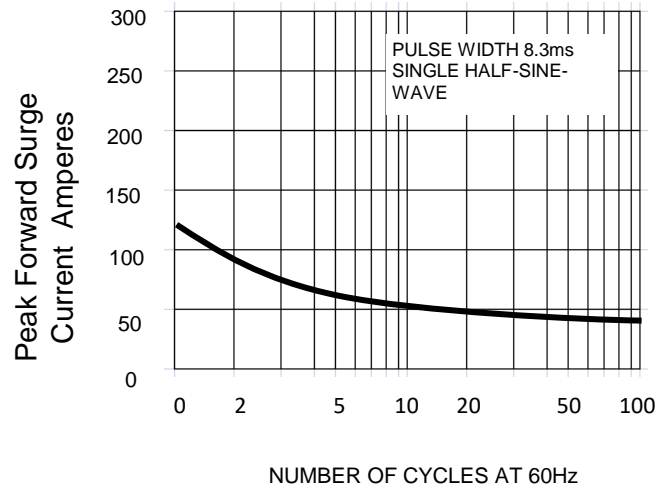


FIG.3-TYPICAL REVERSE CHARACTERISTICS

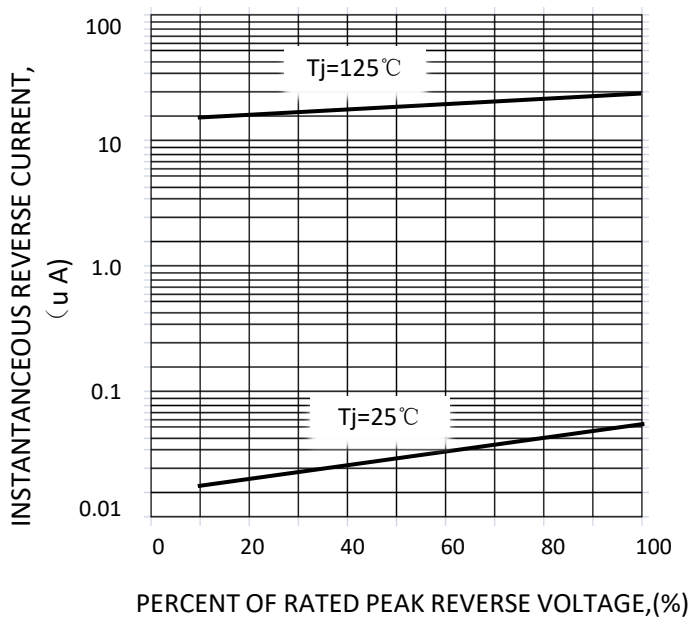
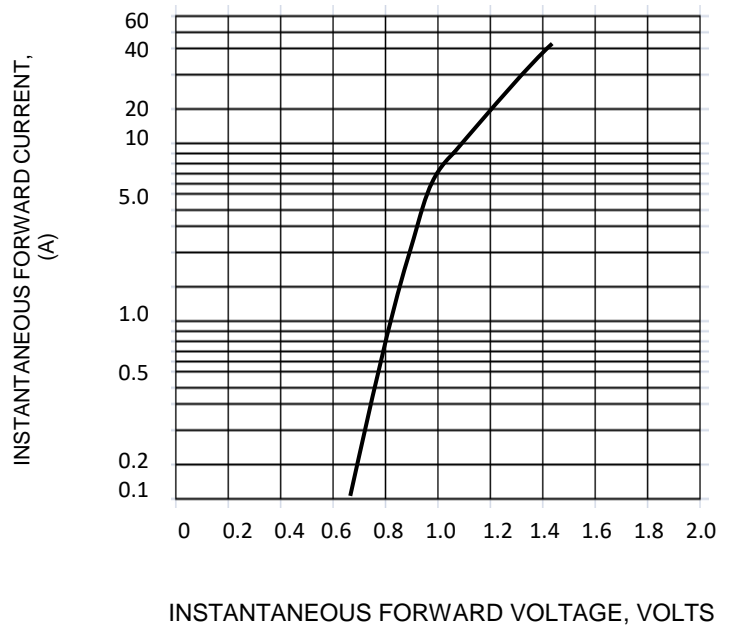
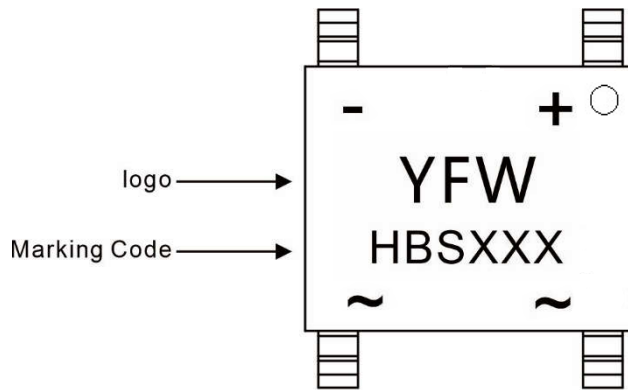


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Marking Diagram



Ordering information

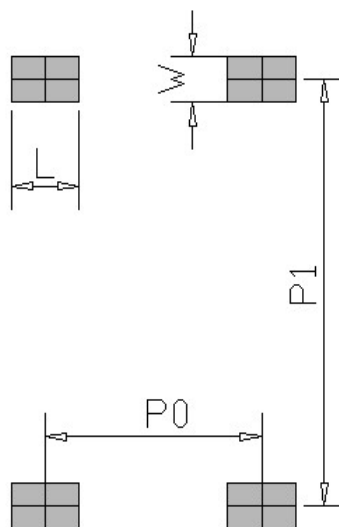
Package	Packing Description	Packing Quantity
HBS	Tape/Reel, 13" reel	2500PCS/Reel 25000PCS/Carton

Package Dimensions

HBS

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	10.0	10.4	0.39	0.41
B	6.9	7.3	0.27	0.28
C	1.4	1.7	0.06	0.07
D	9.6	10.2	0.37	0.40
E	4.9	5.3	0.19	0.20
F	1.3	1.7	0.05	0.06

The recommended mounting pad size



Millimeter(mm)	
DIM	MIN
P0	5.10
P1	9.30
L	1.60
W	1.00

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