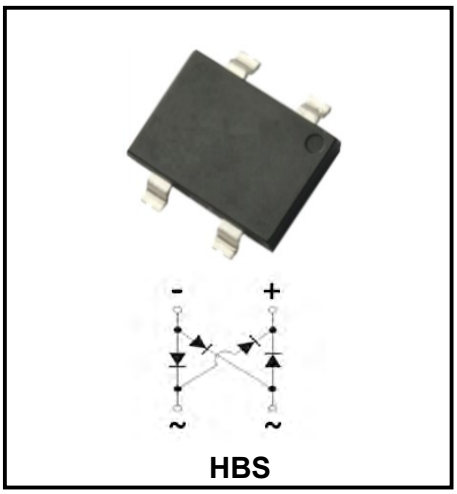
6.0A Single-Phase GLass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 V

Forward Current - 6.0 A



HBS

FEATURES

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 170 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265℃/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℃ ambient temperature unless otherwise specified,Resistive or inductive load,60HZ. For Capacitive load derate current by 20%

Parameter		Symbol	HBS6005	HBS601	HBS602	HBS604	HBS606	HBS608	HBS610	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℃		$I_{F(AV)}$	6.0							A
Max Instantaneous forward voltage drop per diode	I_F=1.0A I_F=3.0A I_F=6.0A	V_F	0.88 0.93 0.96							V
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	170							A
Maximum DC reverse current at ratde DC blocking voltage per element	T_A=25℃ T_A=125℃	I_R	5 100							μA
Rating for fusing(t<8.3ms)		I^2t	119.9							A^2s
Thermal resistance	Between Junction and Ambient	$R_{\theta JA}$	55							°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							°C
Storage Temperature Range		T_{stg}	-55 ~ +150							°C

Rating and Characteristic Curves

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

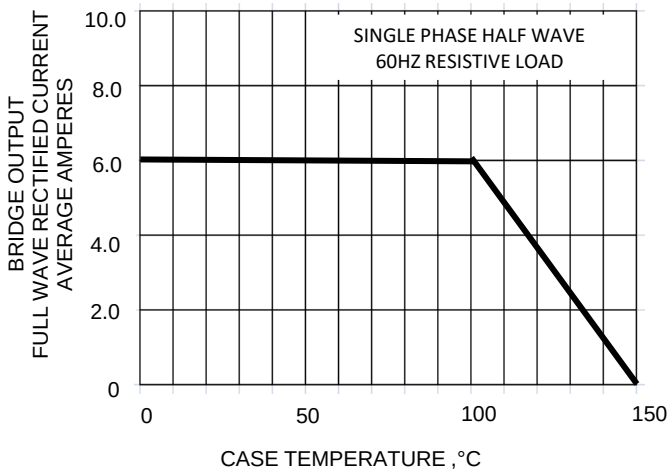


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

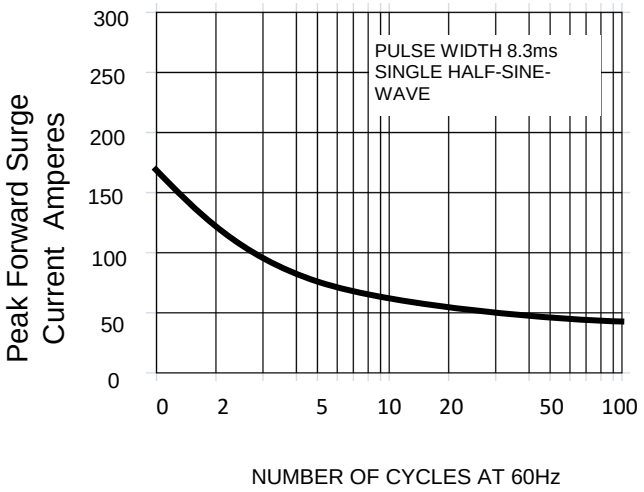


FIG.3-TYPICAL REVERSE CHARACTERISTICS

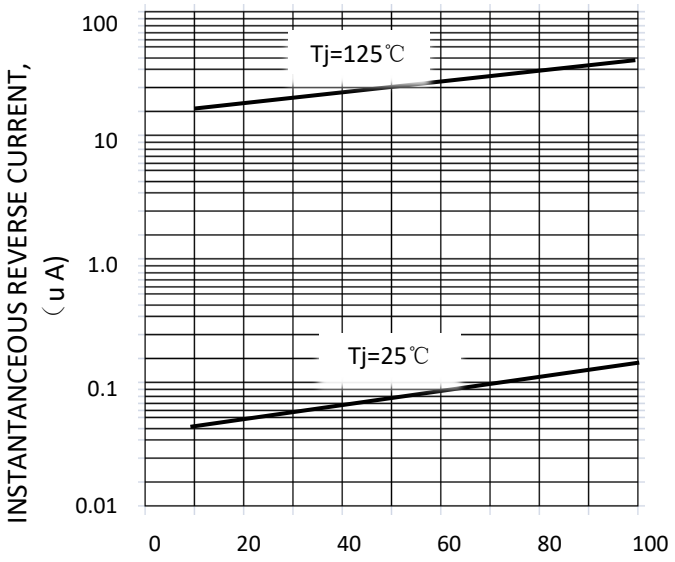
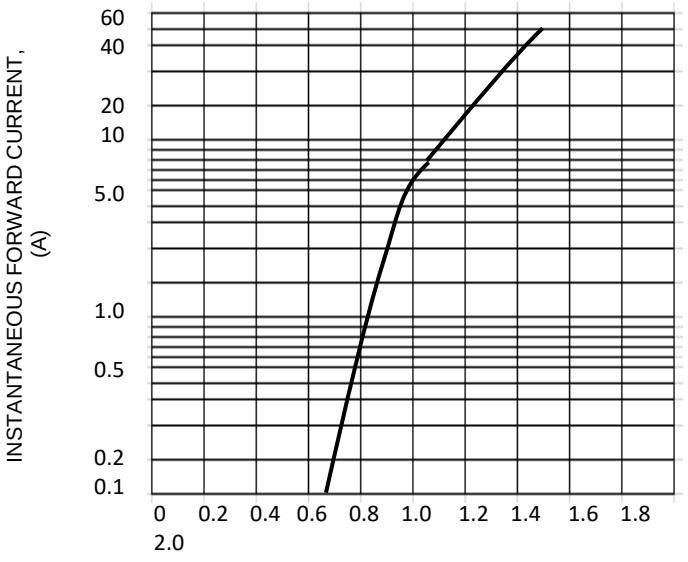
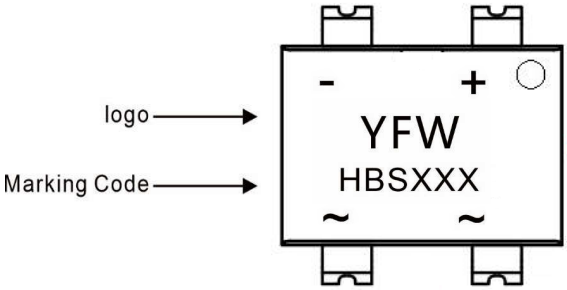


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Marking Diagram

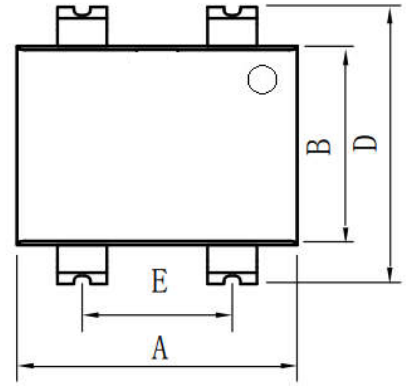


Ordering information

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

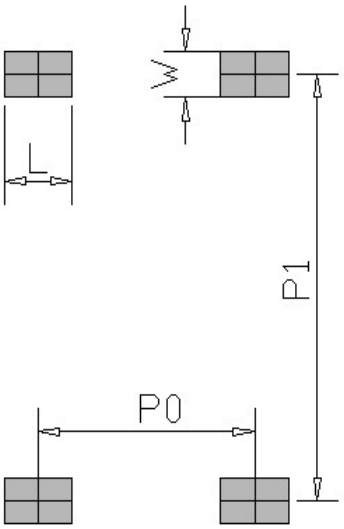
Package Dimensions

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

Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices),YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website https://www.yfwdiode.com, or consult YFW sales office for further assistance.