



HBS6005 thru HBS610

6.0A Single-Phase GLass Passivated Bridge Rectifiers



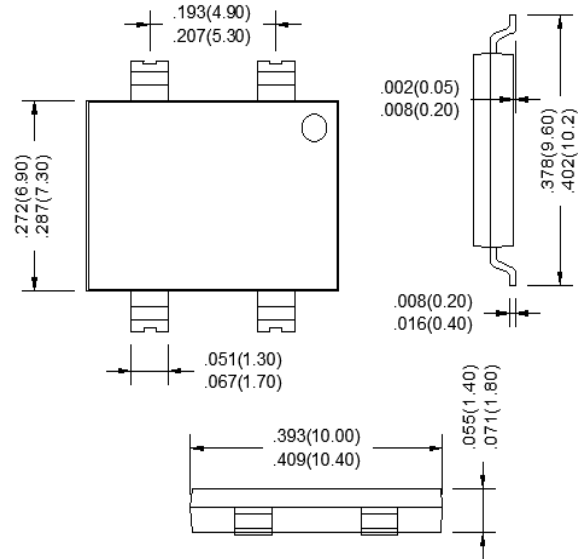
Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 170 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:Molded plastic
 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)

Recifier Reverse Voltage 50V to 1000V HBS



Dimensions in inches and (millimeters)

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	HBS 6005	HBS 601	HBS 602	HBS 604	HBS 606	HBS 608	HBS 610	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 $T_A=40^\circ C$	$I_{F(AV)}$	6.0							A
Instantaneous forward voltage drop per diode	V_F	IF=1.0A	0.83 Typ.			0.88 Max.			V
		IF=3.0A	0.88 Typ.			0.93 Max.			
		IF=6.0A	0.91 Typ.			0.96 Max.			
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	170							A
Maximum DC reverse current at ratde $T_A=25^\circ C$	I_R	5							UA
DC blocking voltage per element $T_A=125^\circ C$		100							
Rating for fusing($t<8.3ms$)	I^2t	119.9							A^2sec
Thermal resistance	Between Junction and Ambient	R_{eJ-A}							$^\circ C/w$
	Between Junction and Lead	R_{eJ-L}							
	Between Junction and Case	R_{eJ-C}							
Operating junction and stroage temperature range	T_J T_{STG}	-55to+150							$^\circ C$



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Rating and Characteristic Curves (TA=25°C Unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

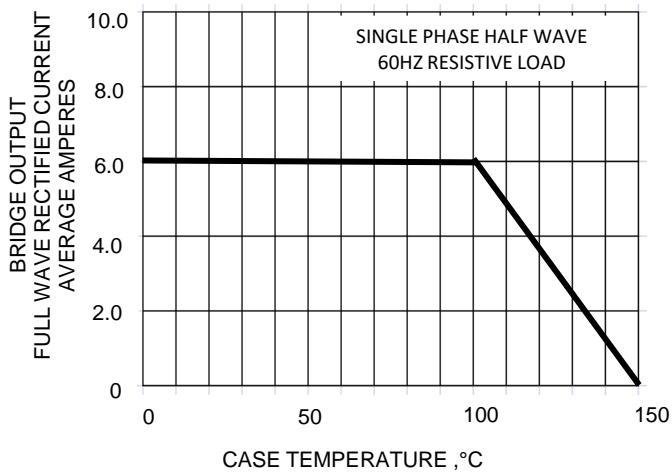


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

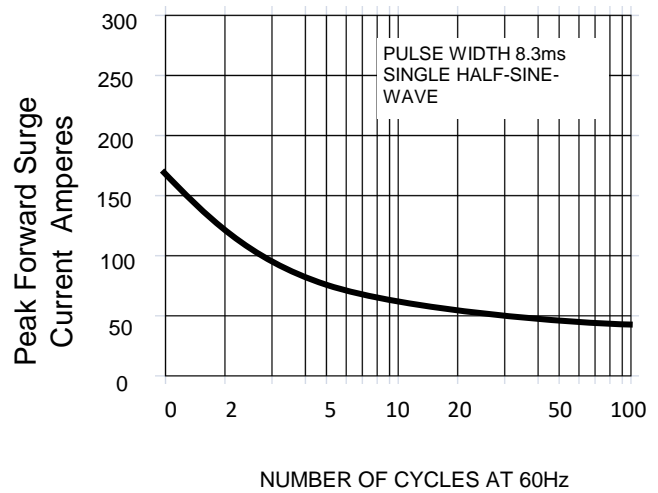


FIG.3-TYPICAL REVERSE CHARACTERISTICS

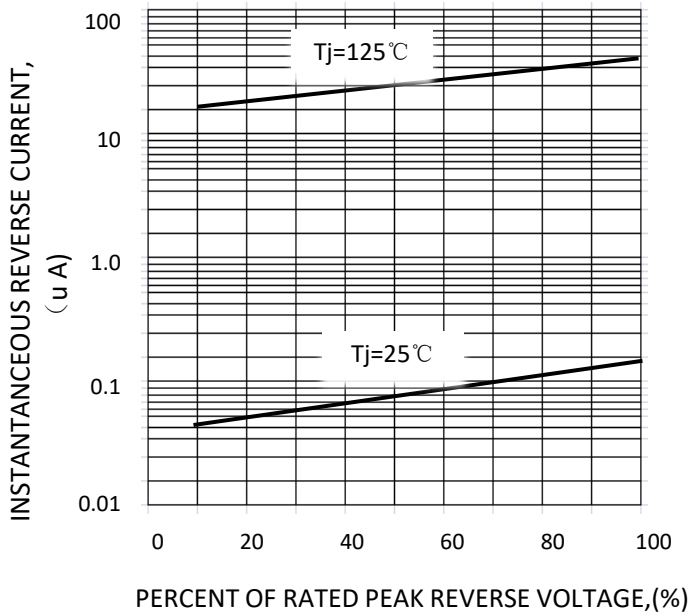
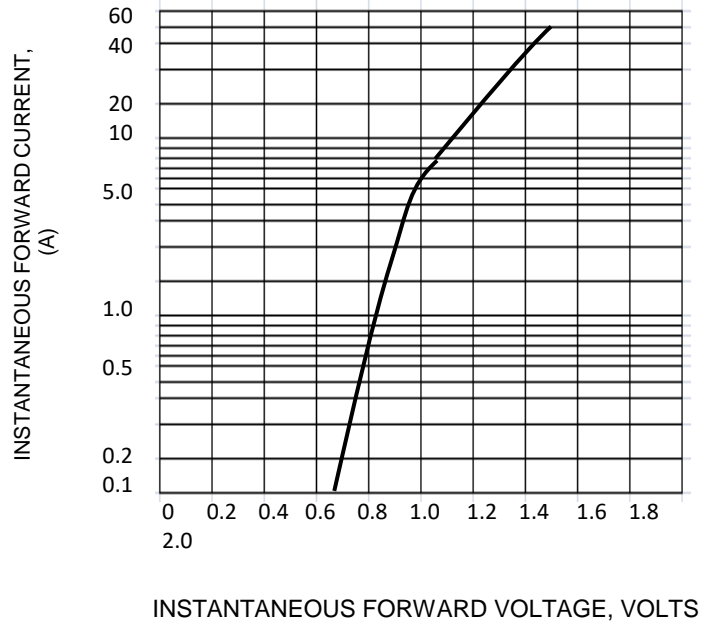
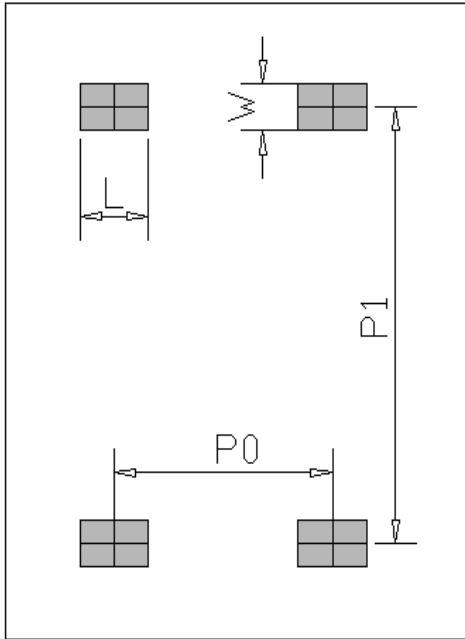


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Suggested pad layout



Unit:mm	
DIM	MIN
P0	5.10
P1	9.30
L	1.60
W	1.00

Dimensions in millimeters

Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
HBS6005~HBS610	Approximate 0.38	2500	5000	25000	13"Reel