



HBS10005 thru HBS1010

10.0A 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 220 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

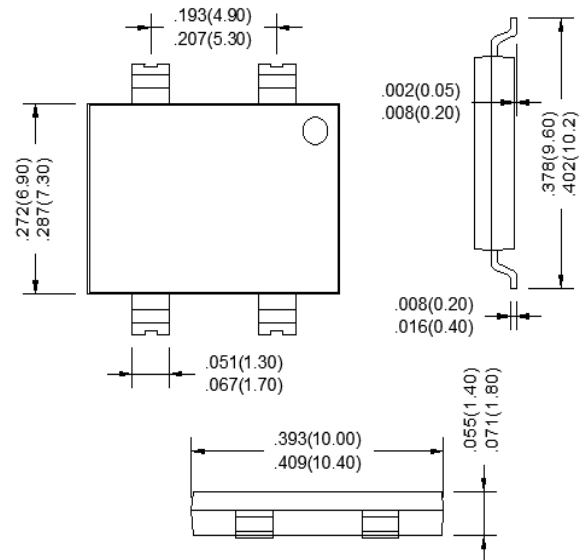
Polarity:Polarity symbols molded or Marked on body

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 10005	HBS 1001	HBS 1002	HBS 1004	HBS 1006	HBS 1008	HBS 1010	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 TA=40℃		I _{F(AV)}	10.0							A
Instantaneous forward voltage drop per diode	IF=1.0A	V _F	0.82 Typ.				0.86 Max.			V
	IF=5.0A		0.89 Typ.				0.94 Max.			
	IF=10.0A		0.95 Typ.				1.05 Max.			
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)		I _{FSM}	220							A
Maximum DC reverse current at ratde TA=25℃		I _R	5							UA
DC blocking voltage per element TA=125℃			100							
Rating for fusing(t<8.3ms)		I ² t	200.9							A ² sec
Thermal resistance	Between Junction and Ambient	R _{eJ-A}	55							℃/w
	Between Junction and Lead	R _{eJ-L}	10							
	Between Junction and Case	R _{eJ-C}	3							
Operating junction and stroage temperature range		T _J , T _{STG}	-55to+150							℃

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

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

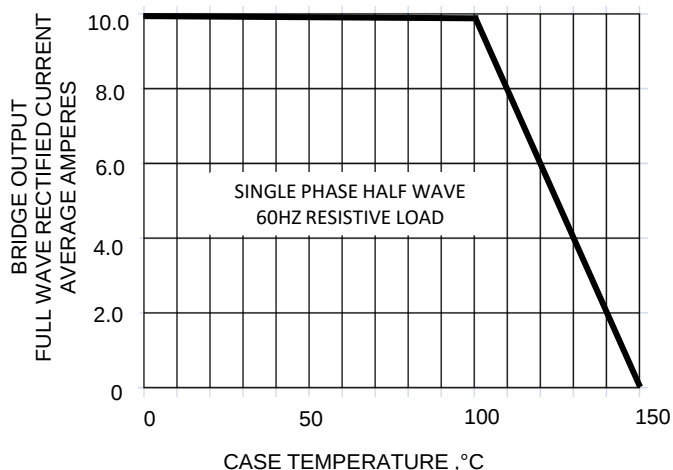


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

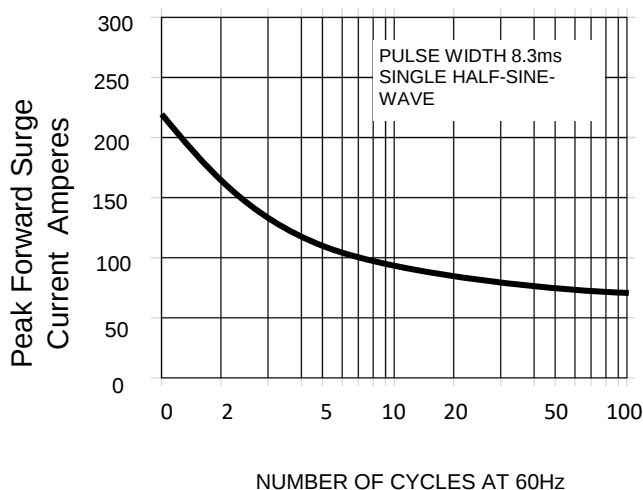


FIG.3-TYPICAL REVERSE CHARACTERISTICS

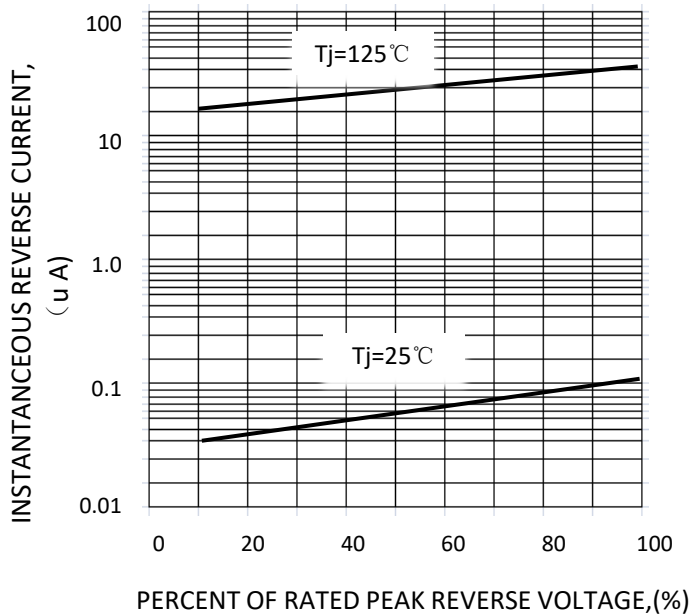
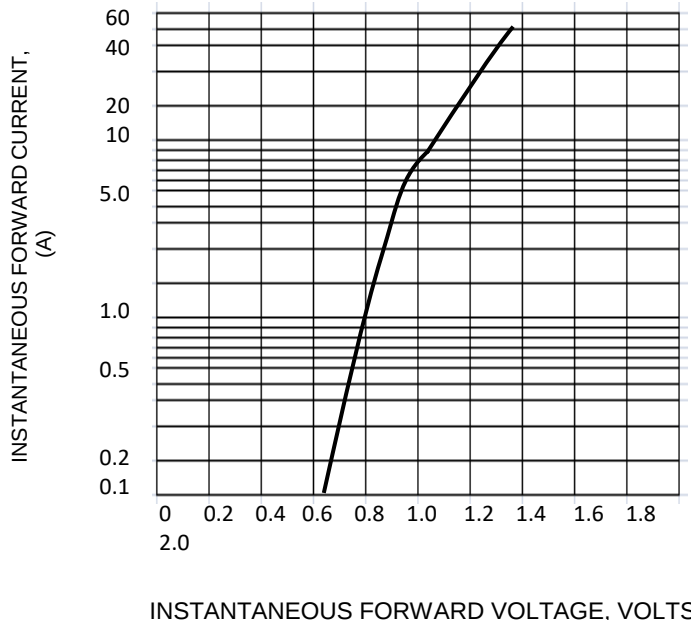
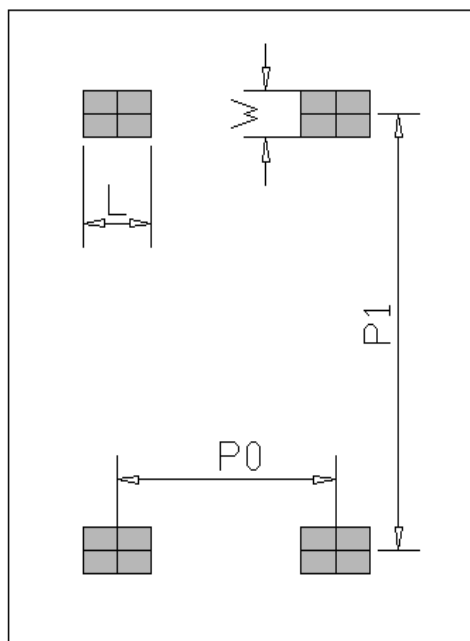


FIG.4-TYPICAL FORWARD CHARACTERISTICS



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
HBS10005~HBS1010	Approximate 0.38	2500	5000	25000	13"Reel