HBS10005 thru HBS1010

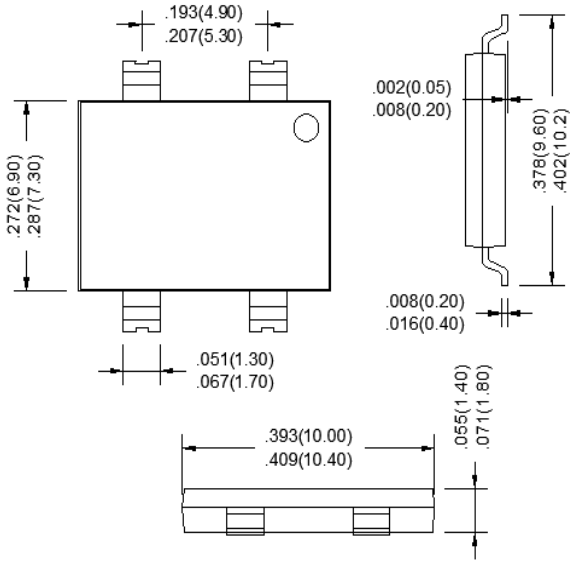
10.0A Single-Phase GLass Passivated Bridge Rectifiers

Recifiter Reverse Voltage 50V to 1000V

HBS

Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Suge overload ratings to 220 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265℃/10 seconds at 5 lbs(2.3kg)tension



Dimensions in inches and (milimeters)

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)

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	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^2t	200.9							A^2sec
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℃ Uniless otherwise noted)

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FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

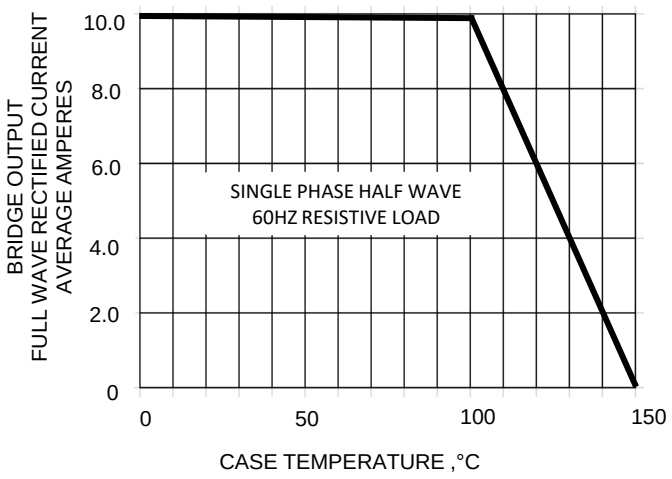


FIG.2-MAXIMUM NON-REPETITIVE SUNRGE CURRENT

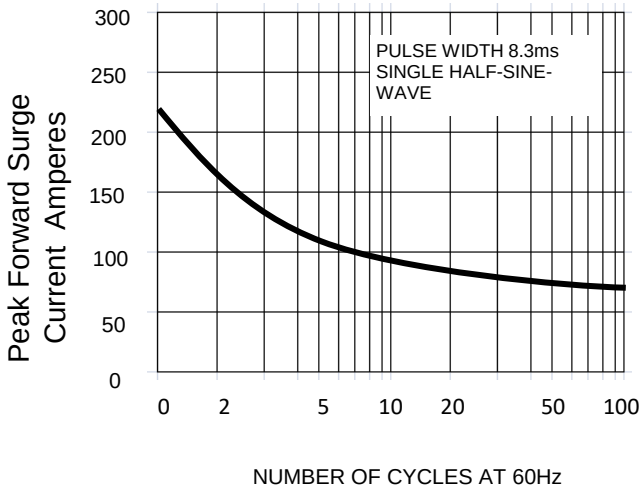


FIG.3-TYPICAL REVERSE CHARACTERISTICS

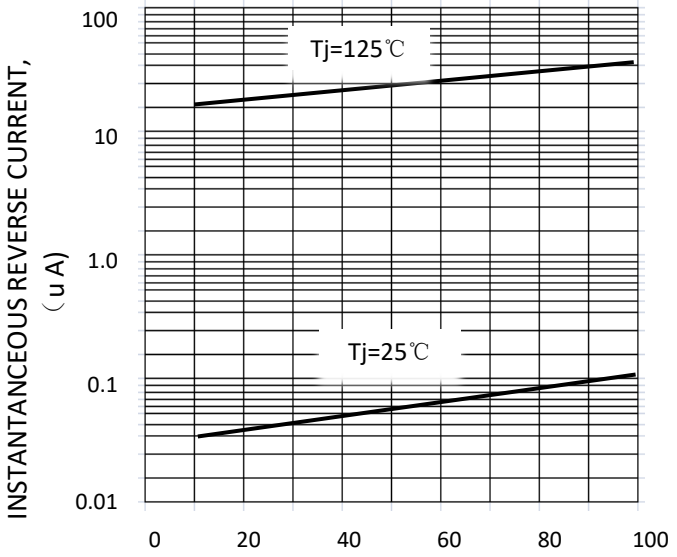
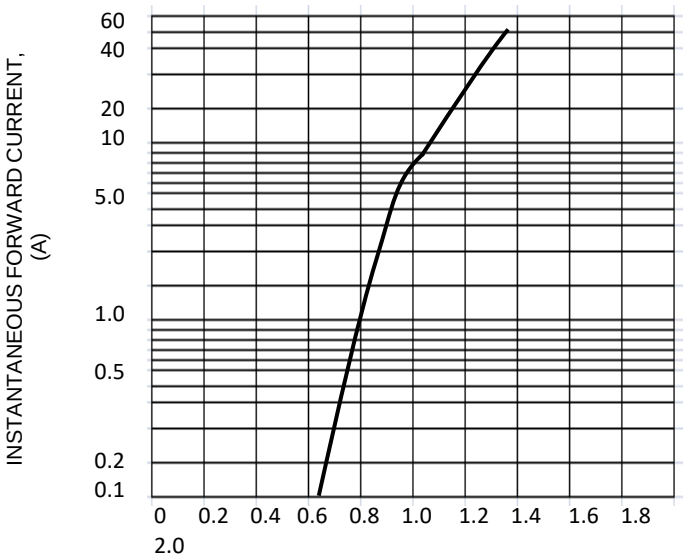
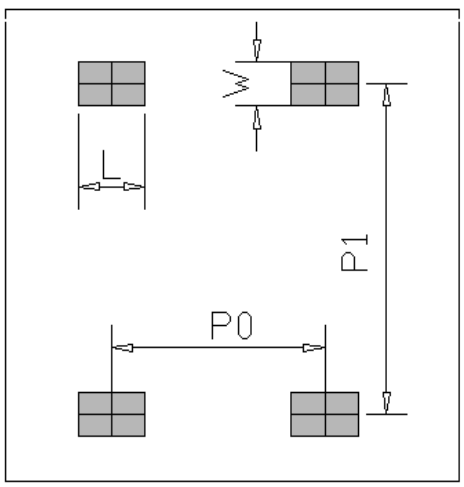


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Suggested pad layout



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