

HBS6005 thru HBS610

6.0A 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
- 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

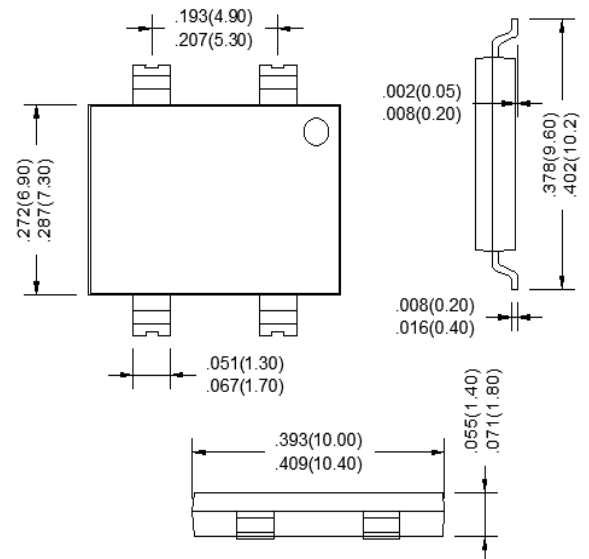
Case:Molded plastic

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)



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 TA=40℃		$I_{F(AV)}$	6.0							A
Instantaneous forward voltage drop per diode	IF=1.0A	V_F	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 TA=25℃		I_R	5							UA
DC blocking voltage per element TA=125℃			100							
Rating for fusing(t<8.3ms)		I^2t	119.9							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}	6							
Operating junction and stroage temperature range		T_J , T_{STG}	-55to+150							℃

Rating and Characteristic Curves(TA=25°C Unless otherwise noted)
HBS6005 thru HBS610

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED

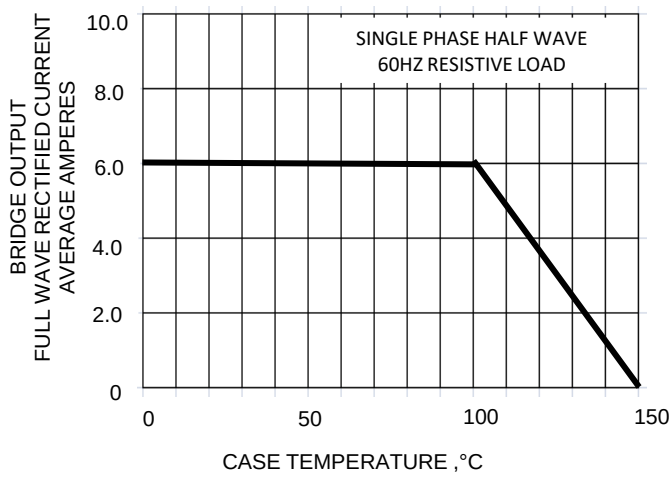


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

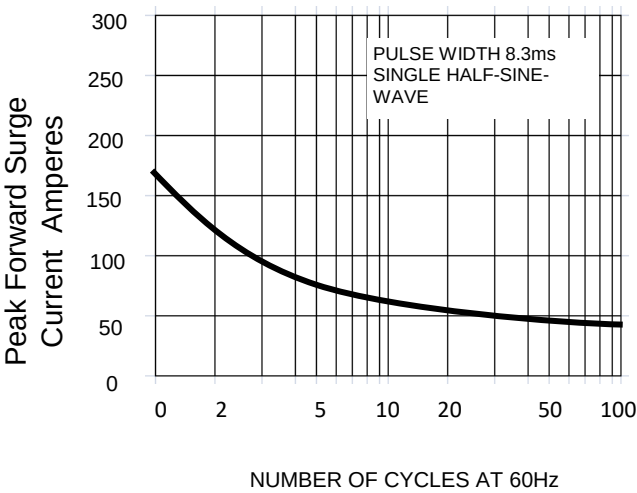


FIG.3-TYPICAL REVERSE CHARACTERISTICS

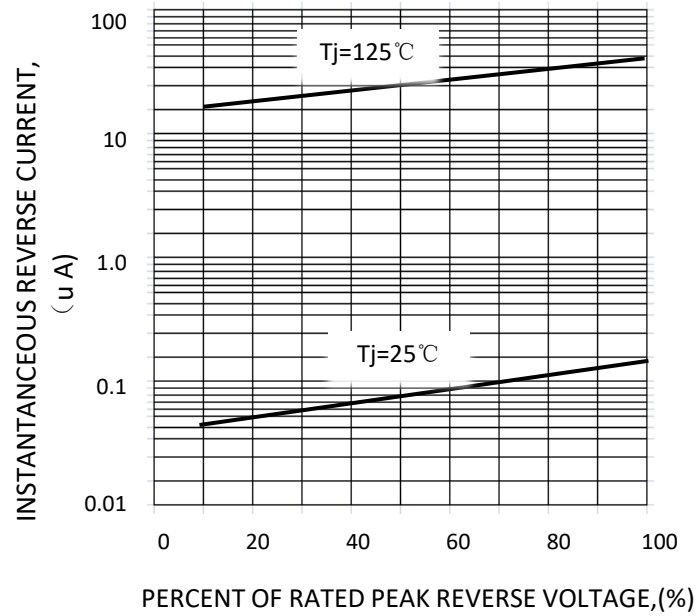


FIG.4-TYPICAL FORWARD CHARACTERISTICS

