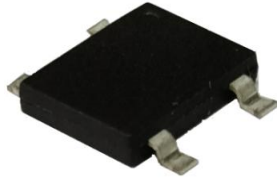


## 6.0A Single-Phase GLass Passivated Bridge Rectifiers

Rectifier Reverse Voltage 50V to 1000V



**DBF**

### Features

- Glass passivated junction
- The plastic material used carries Underwriters Laboratory flammability recognition 94V-0
- Surge overload ratings to 85 amperes peak
- Ideal for printed circuit board application
- High temperature soldering guaranteed 265°C/10 seconds at 5 lbs(2.3kg)tension

### Mechanical Data

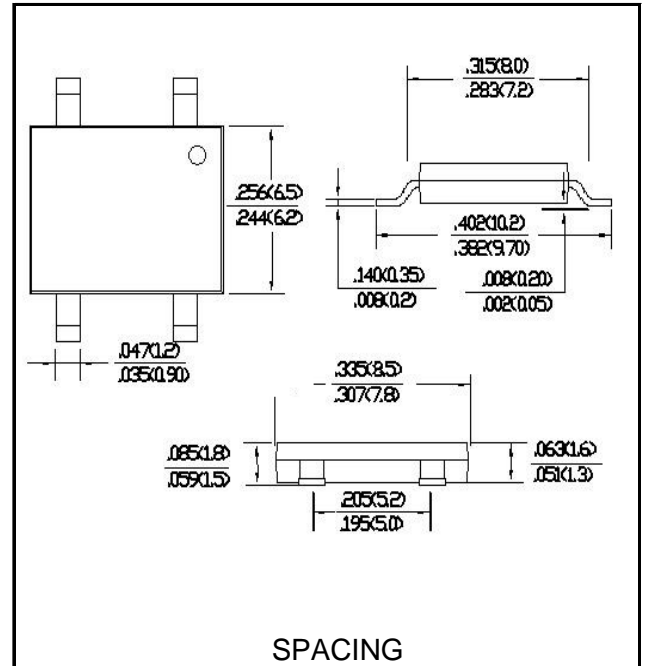
Case:Molded plastic

Terminals:Plate leads solderable per MIL-STD-750, Method 2026

Polarity:Polarity symbols molded or Marked on body

Mounting Position:Any

Weight:0.007ounce,0.22 grams(approx)



SPACING

### 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	DBF 6005	DBF 601	DBF 602	DBF 604	DBF 606	DBF 608	DBF 610	unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	I <sub>F(AV)</sub>	6.0							A
Maximum instantaneous forward voltage drop per diode at I <sub>FM</sub> =2.0A	V <sub>F</sub>	1.05							V
Surge(non-repetitive) forward current@60HZ sine wave,1cycle. T <sub>j</sub> =25°C	I <sub>FSM</sub>	150							A
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	93							A <sup>2</sup> sec
Between Junction and Ambient(1)	R <sub>θJA</sub>	55							°C/w
Maximum DC reverse current at ratde TA=25°C	I <sub>R</sub>	5							μ A
DC blocking voltage per diode TA=125°C		100							
Operating j temperature range	T <sub>J</sub>	-55to+150							°C
Storage temperature range	T <sub>STG</sub>	-55to+150							°C

Notes: (1) Thermal resistance from junction to ambient mounted on P.C.B with 0.5\*0.5(13\*13mm)copper pads



# DBF6005 thru DBF610

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

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

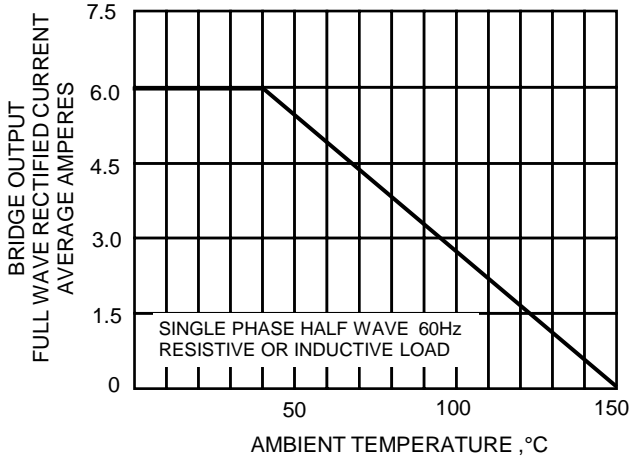


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

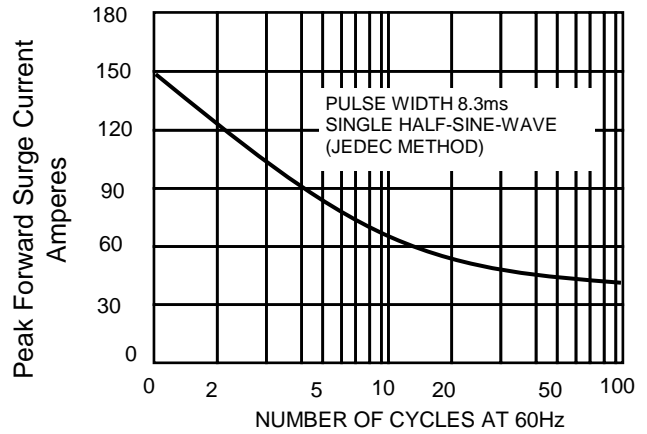


FIG.3-TYPICAL JUNCTION CAPACITANCE

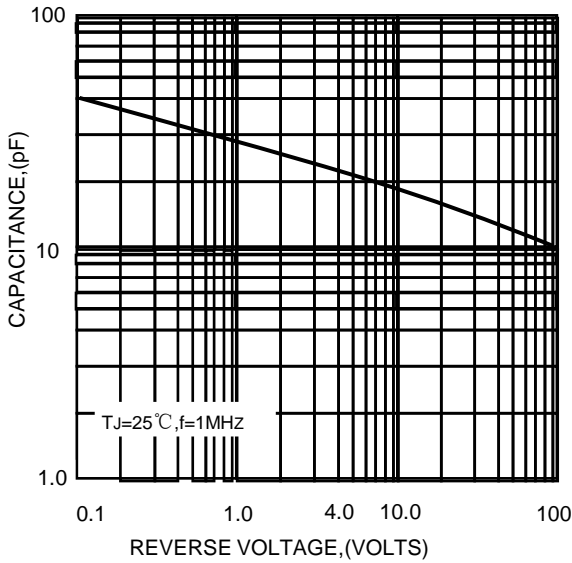


FIG.4-TYPICAL FORWARD CHARACTERISTICS

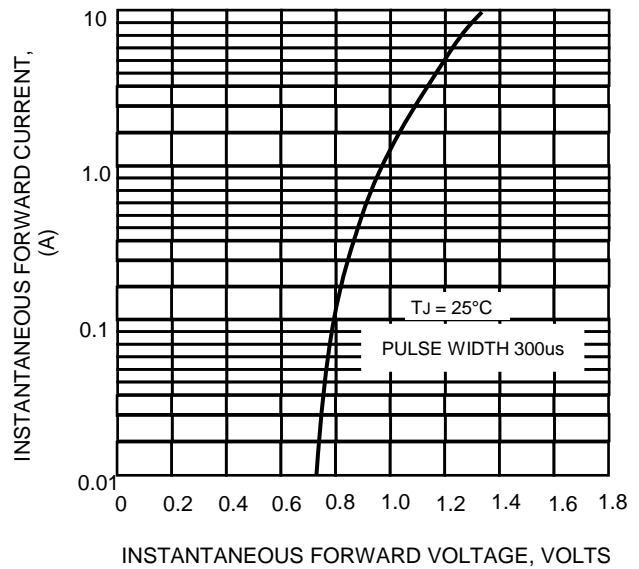
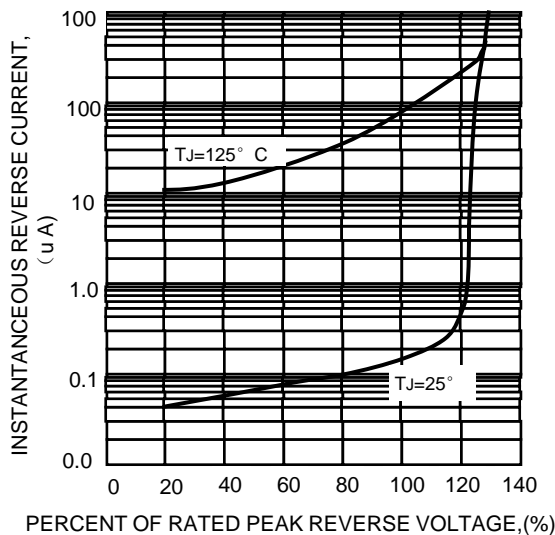


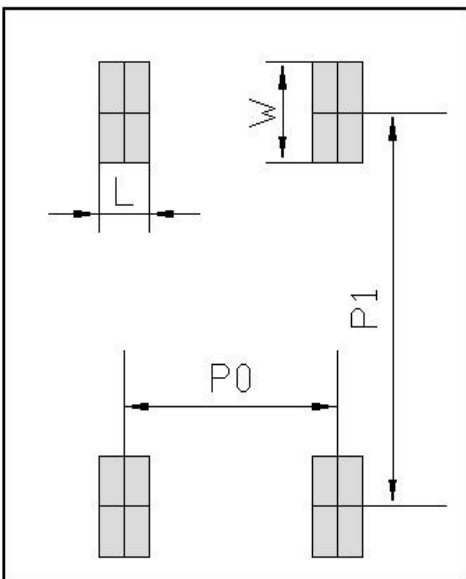
FIG.5-TYPICAL REVERSE CHARACTERISTICS



## Ordering Information(Example)

PREFFREN P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
DBF6005~DBF610	Approximate 0.22	2500	5000	25000	REEL

## Suggested pad layout



Dimensions in millimeters

Unit:mm	
DIM	MIN
P0	5.12
P1	8.73
L	1.2
W	2.22

