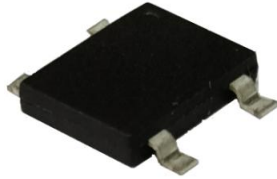


6.0A Single-Phase GLass Passivated Bridge Rectifiers

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

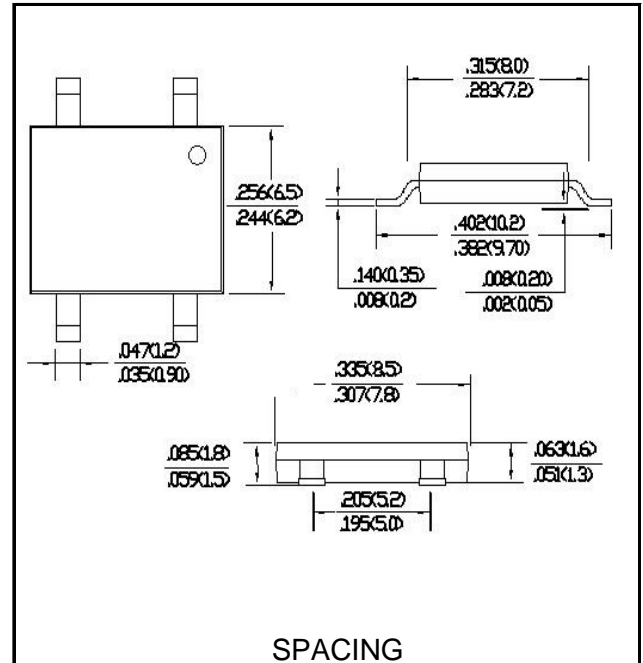
Case:Molded plastic

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 _{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°C | I _{F(AV)} | 6.0 | | | | | | | A |
| Maximum instantaneous forward voltage drop per diode at I _{FM} =2.0A | V _F | 1.05 | | | | | | | V |
| Surge(non-repetitive) forward current@60HZ sine wave,1cycle. T _j =25°C | I _{FSM} | 150 | | | | | | | A |
| Rating for fusing(t<8.3ms) | I ² t | 93 | | | | | | | A ² sec |
| Between Junction and Ambient(1) | R _{θJA} | 55 | | | | | | | °C/w |
| Maximum DC reverse current at ratde TA=25°C | I _R | 5 | | | | | | | μ A |
| DC blocking voltage per diode TA=125°C | | 100 | | | | | | | |
| Operating j temperature range | T _J | -55to+150 | | | | | | | °C |
| Storage temperature range | T _{STG} | -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

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

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

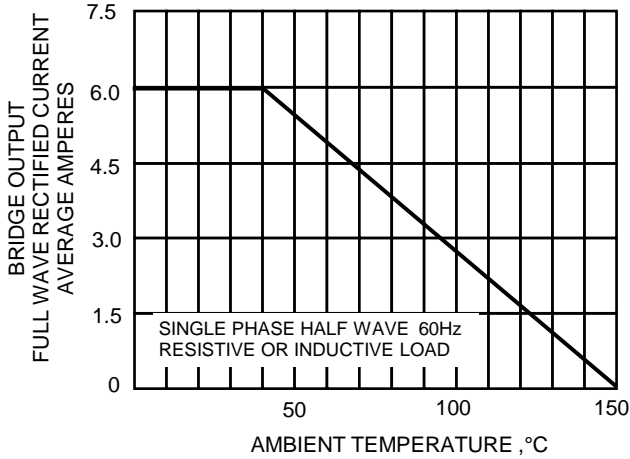


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

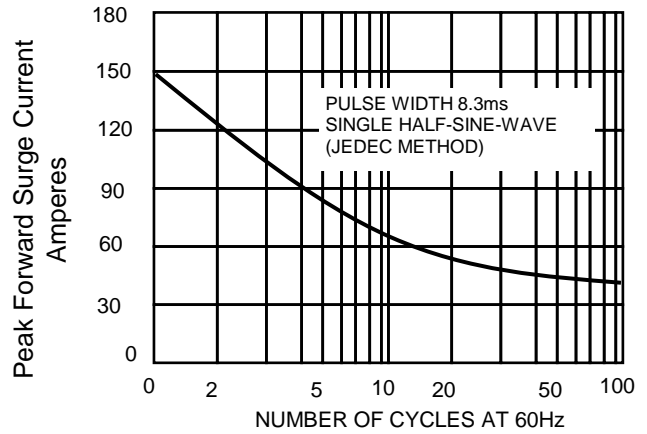


FIG.3-TYPICAL JUNCTION CAPACITANCE

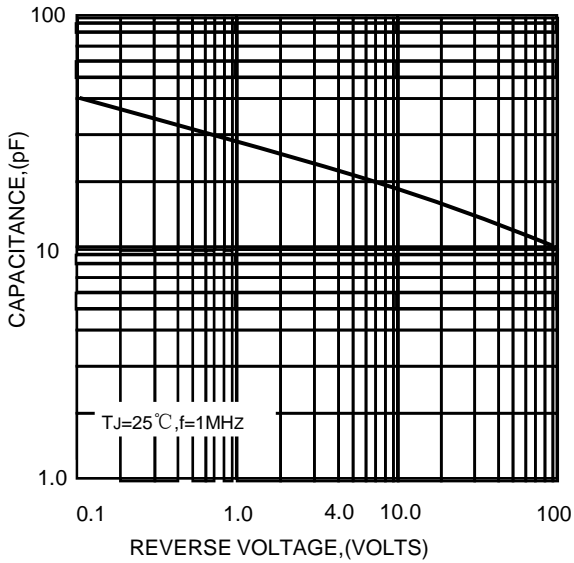


FIG.4-TYPICAL FORWARD CHARACTERISTICS

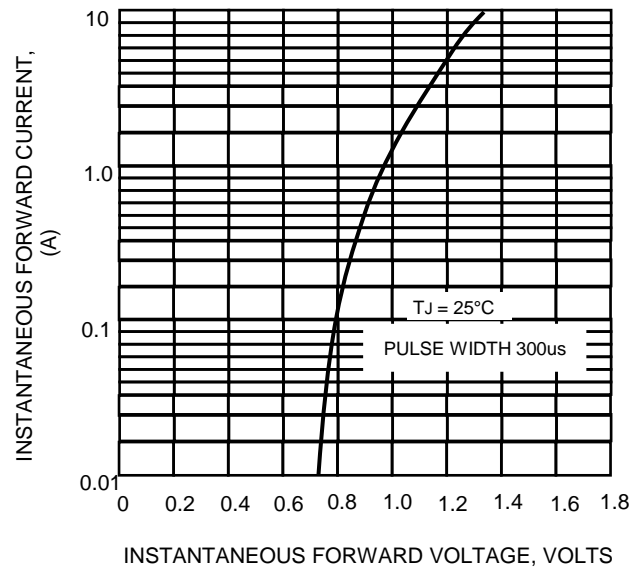
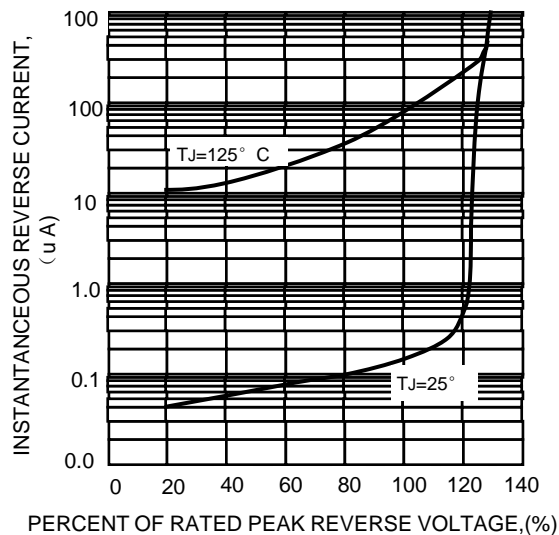


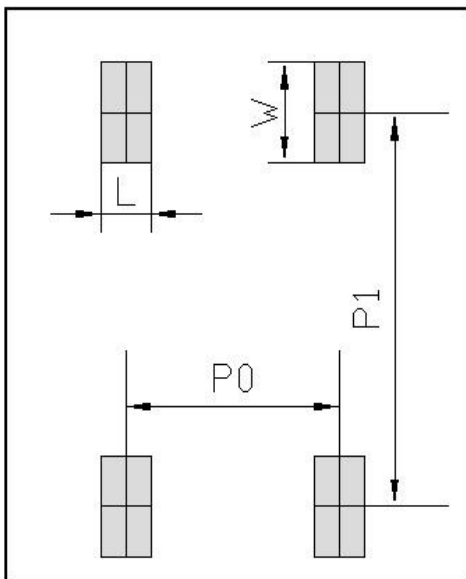
FIG.5-TYPICAL REVERSE CHARACTERISTICS



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 |