
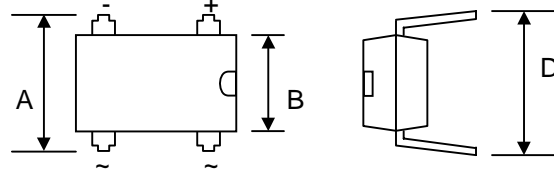


1.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

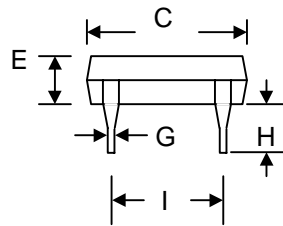
Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Ideal for Printed Circuit Boards
-  Recognized File # E157705



Mechanical Data

- Case: DIL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 1.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



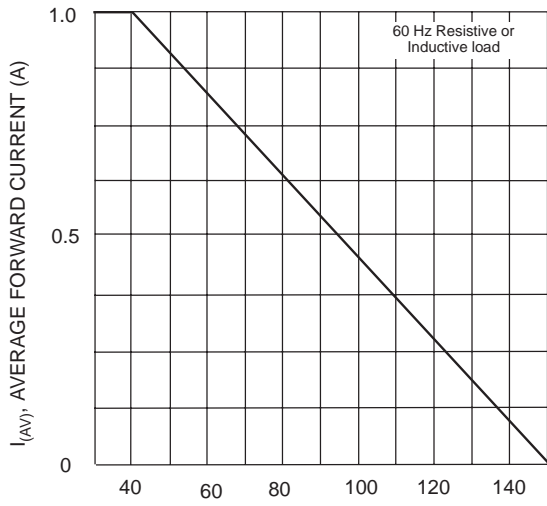
| DIL | | |
|----------------------|------|------|
| Dim | Min | Max |
| A | 7.30 | 7.90 |
| B | 6.10 | 6.50 |
| C | 8.03 | 8.51 |
| D | 7.60 | 8.90 |
| E | 2.20 | 2.60 |
| G | 0.45 | 0.55 |
| H | 3.80 | 4.90 |
| I | 5.00 | 5.20 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

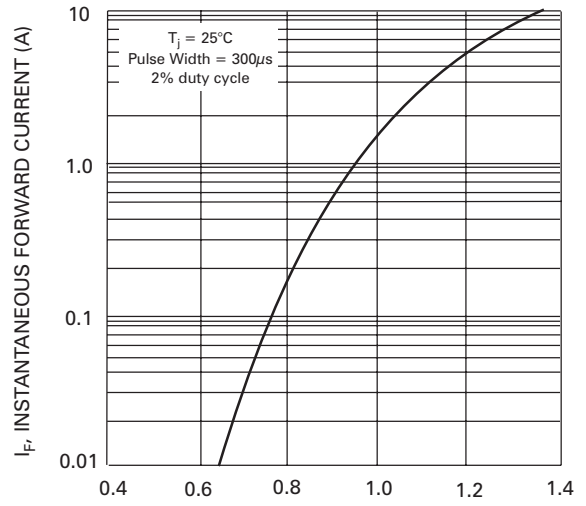
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| Characteristic | Symbol | DF005 | DF01 | DF02 | DF04 | DF06 | DF08 | DF10 | Unit |
|---|------------------------------------|-------------|------|------|------|------|------|------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | | | | | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | V_R | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_A = 40^\circ\text{C}$ | I_o | 1.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| Forward Voltage per element @ $I_F = 1.0\text{A}$ | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | I_{RM} | 5.0 500 | | | | | | | μA |
| Typical Junction Capacitance per element (Note 1) | C_j | 25 | | | | | | | pF |
| Typical Thermal Resistance per leg (Note 2) | $R_{\theta JA}$ $R_{\theta JL}$ | 40 15 | | | | | | | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

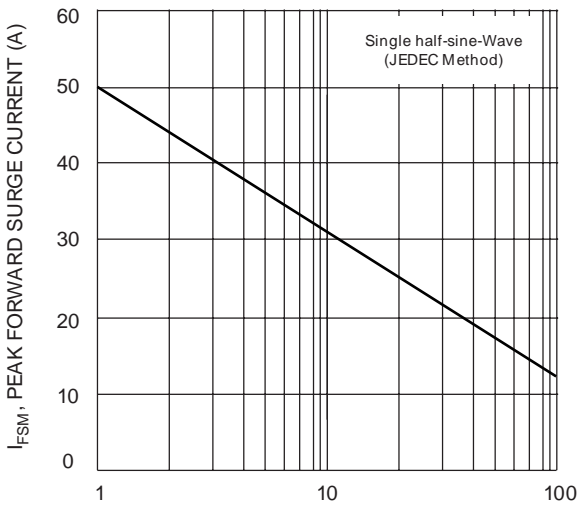
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on PC board with 13mm² copper pad.



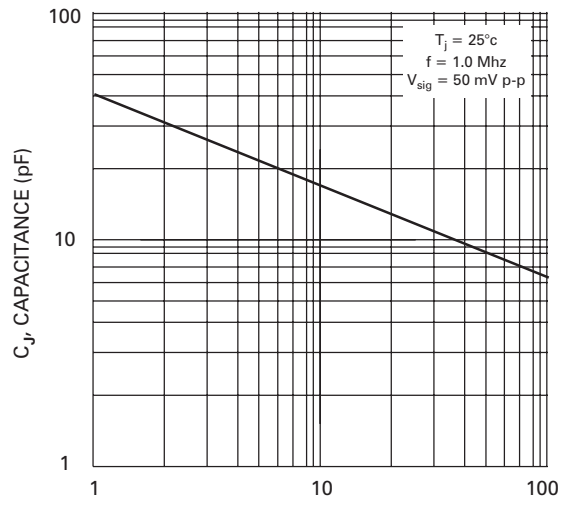
T_A , AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



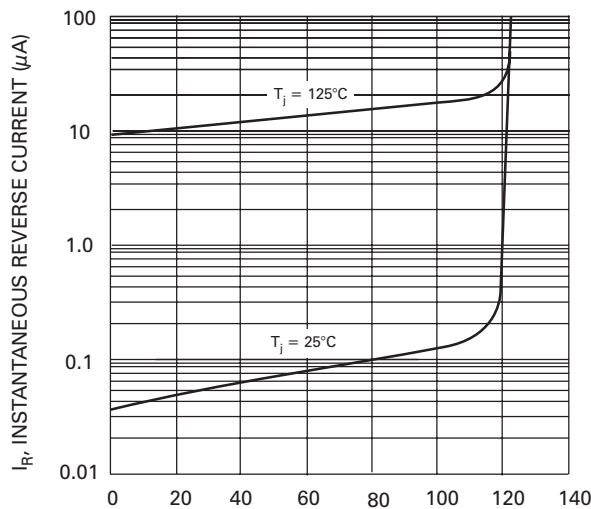
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current

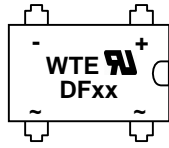


V_R , REVERSE VOLTAGE (V)
Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ Reverse Characteristics (per element)

MARKING INFORMATION



WTE = Manufacturer's Logo
 DFxx = Device Number
 xx = 005, 01, 02, 04, 06, 08, 10
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

| Tube Size L x W x H (mm) | Quantity (PCS) | Inner Box Size L x W x H (mm) | Quantity (PCS) | Carton Size L x W x H (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|-----------------------------|-------------------|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 420 x 12 x 10 | 50 | 470 x 145 x 75 | 2,500 | 495 x 245 x 180 | 7,500 | 6.0 |

Note: 1. Anti-static tube, water clear color.

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| DF005 | DIL Bridge | 50 Units/Tube |
| DF01 | DIL Bridge | 50 Units/Tube |
| DF02 | DIL Bridge | 50 Units/Tube |
| DF04 | DIL Bridge | 50 Units/Tube |
| DF06 | DIL Bridge | 50 Units/Tube |
| DF08 | DIL Bridge | 50 Units/Tube |
| DF10 | DIL Bridge | 50 Units/Tube |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, DF005-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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