## 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
- ㄱIT 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


| 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 $\mathbf{~ m m}$ |  |  |

- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4


## Maximum Ratings and Electrical Characteristics $@ T_{A}=25^{\circ} \mathrm{C}$ unless otherwise specified

Single Phase, half wave, 60 Hz , 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 Working Peak Reverse Voltage DC Blocking Voltage | VrRm <br> Vrwm VR | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | VR(RMS) | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current $@ T_{A}=40^{\circ} \mathrm{C}$ | lo | 1.0 |  |  |  |  |  |  | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 50 |  |  |  |  |  |  | A |
| Forward Voltage per element $\quad$ @l $\mathrm{I}_{\text {= }}$ 1.0A | VFM | 1.1 |  |  |  |  |  |  | V |
| Peak Reverse Current <br> $@ T_{A}=25^{\circ} \mathrm{C}$ <br> At Rated DC Blocking Voltage <br> $@ T_{A}=125^{\circ} \mathrm{C}$ | IRM | $\begin{aligned} & 5.0 \\ & 500 \end{aligned}$ |  |  |  |  |  |  | $\mu \mathrm{A}$ |
| Typical Junction Capacitance per element (Note 1) | $\mathrm{C}_{\mathrm{j}}$ | 25 |  |  |  |  |  |  | pF |
| Typical Thermal Resistance per leg (Note 2) | $\mathrm{R}_{\theta \mathrm{JA}}$ <br> $\mathrm{R}_{\theta \mathrm{JL}}$ | $\begin{aligned} & 40 \\ & 15 \end{aligned}$ |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C} / \mathrm{W}$ |
| Operating and Storage Temperature Range | Tj, Tsta | -55 to +150 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V D.C.
2. Mounted on PC board with $13 \mathrm{~mm}^{2}$ copper pad.



## MARKING INFORMATION



$$
\begin{array}{ll}
\text { WTE } & =\text { Manufacturer's Logo } \\
\text { DFxx } & =\text { Device Number } \\
\text { xx } & =005,01,02,04,06,08,10 \\
\text { Polarity } & =\text { As Marked on Body }
\end{array}
$$

## PACKAGING INFORMATION

## BULK

| Tube Size <br> $\mathrm{L} \times \mathrm{W} \times \mathrm{H}(\mathrm{mm})$ | Quantity <br> (PCS) | Inner Box Size <br> $\mathrm{L} \times \mathrm{W} \times \mathrm{H}(\mathrm{mm})$ | Quantity <br> $(\mathrm{PCS})$ | Carton Size <br> $\mathrm{L} \times \mathrm{W} \times \mathrm{H}(\mathrm{mm})$ | Quantity <br> $(\mathrm{PCS})$ | Approx. Gross Weight <br> $(\mathrm{KG})$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $420 \times 12 \times 10$ | 50 | $470 \times 145 \times 75$ | 2,500 | $495 \times 245 \times 180$ | 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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