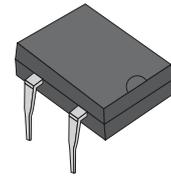


DF005-G Thru. DF10-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.0A

RoHS Device

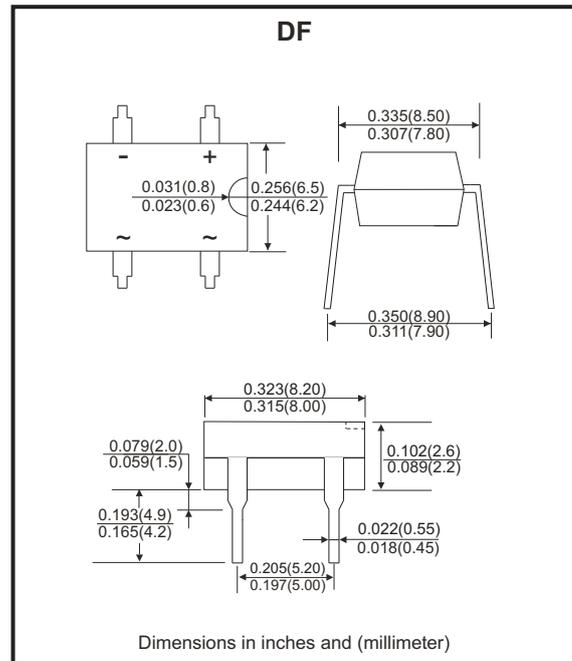


Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Low forward voltage drop.
- High current capability.
- The plastic material has UL flammability classification 94V-0
- UL recognized file # E349301

Mechanical Data

- Polarity: As marked on Body.
- Weight: 0.38 grams.
- Mounting position: Any.



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Parameter | Symbol | DF005-G | DF01-G | DF02-G | DF04-G | DF06-G | DF08-G | DF10-G | Unit |
|--|-----------------|------------|--------|--------|--------|--------|--------|--------|---------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS 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 Current @ $T_A=40^\circ\text{C}$ | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed on Rated Load | I_{FSM} | 30 | | | | | | | A |
| $I^2 t$ Rating for Fusing ($t < 8.3\text{ms}$) | $I^2 t$ | 3.735 | | | | | | | A^2s |
| Maximum Forward Voltage at 1.0A DC | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_J = 125^\circ\text{C}$ | I_r | 10 500 | | | | | | | μA |
| Typical Junction Capacitance Per Element (Note 1) | C_J | 25 | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 40 | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 ~ +150 | | | | | | | $^\circ\text{C}$ |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. Thermal resistance from junction to ambient mounted on P.C.B, with 0.50"×0.50" (13×13mm) copper pads.

Company reserves the right to improve product design, functions and reliability without notice.

REV: D

Rating and Characteristics Curves (DF005-G Thru. DF10-G)

Fig.1 - Forward Current Derating Curve

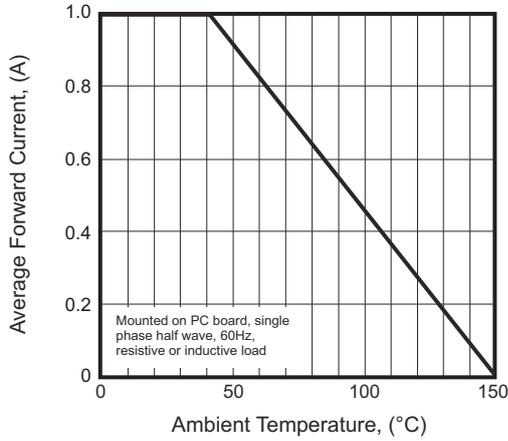


Fig.2 - Maximum Non-Repetitive Surge Current

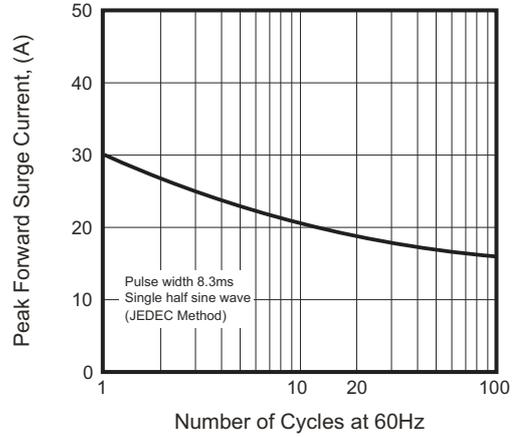


Fig.3 - Typical Junction Capacitance

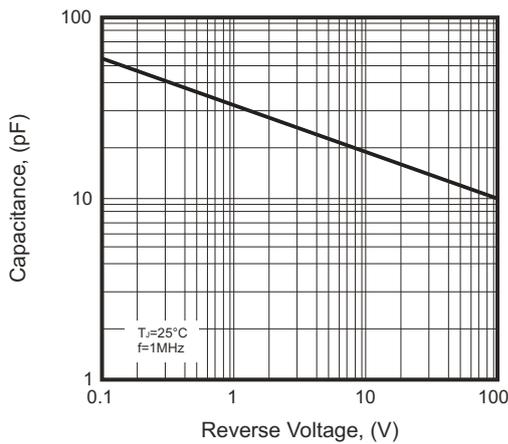


Fig.4 - Typical Forward Characteristics

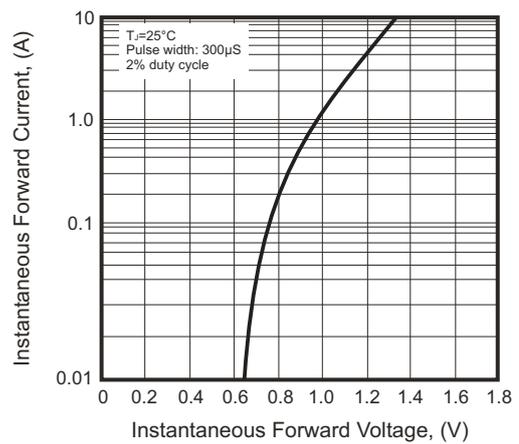
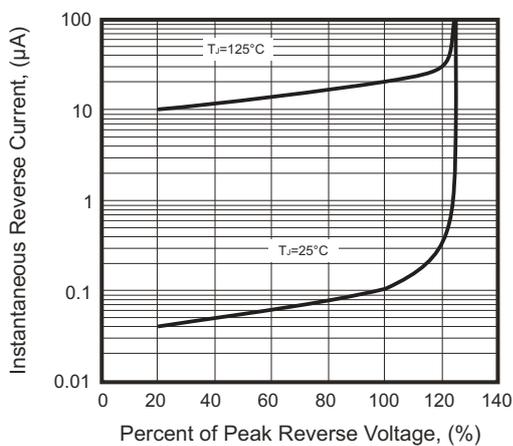


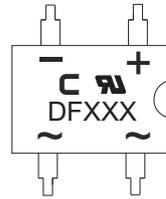
Fig.5 - Typical Reverse Characteristics



Company reserves the right to improve product design, functions and reliability without notice.

Marking Code

| Part Number | Marking code |
|-------------|--------------|
| DF005-G | DF005 |
| DF01-G | DF01 |
| DF02-G | DF02 |
| DF04-G | DF04 |
| DF06-G | DF06 |
| DF08-G | DF08 |
| DF10-G | DF10 |



XX / XXX = Product type marking code
C = Comchip Logo

Standard Packaging

| Case Type | TUBE PACK | |
|-----------|-----------------|----------------|
| | TUBE (pcs) | BOX (pcs) |
| DF | 50 | 2,500 |