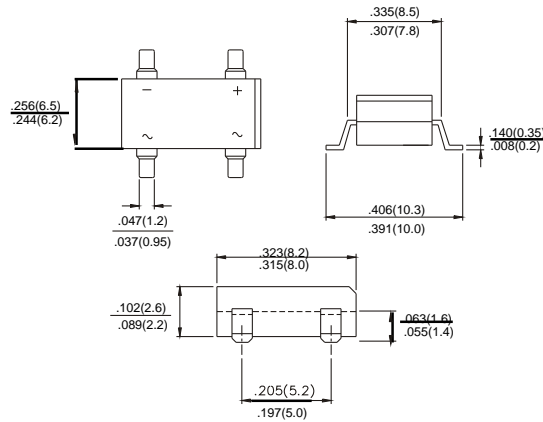
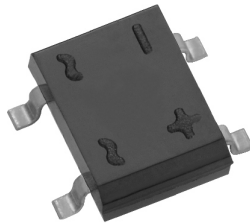


DF005SF thru DF10SF

SINGLE-PHASE GLASS PASSIVATED SMD BRIDGE RECTIFIERS

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 1.0 AMPERES



FEATURES

- Rating to 1000 V PRV
- Ideal for printed circuit board
- Low Forward Voltage drop, high current capability
- Reliable low cost construction utilizing molded Plastic technique results in inexpensive product
- Lead tin Pb/Sn copper
- The plastic material has UL flammability Classification 94V-0

MECHANICAL DATA

Polarity: As marked on Body
 Weight: 0.02 ounces, 0.38 grams
 mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | DF005SF | DF01SF | DF02SF | DF04SF | DF06SF | DF08SF | DF10SF | UNITS |
|---|--------------------|-------------|--------|--------|--------|--------|--------|--------|-----------------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current @ $T_A=40^\circ\text{C}$ | $V_{(AV)}$ | 1.0 | | | | | | | Amps |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load | I_{FSM} | 50 | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage Drop per Bridge Element at 1.0A | V_F | 1.1 | | | | | | | Volts |
| Maximum DC Reverse @ $T_A=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$ | I_R | 10 500 | | | | | | | μA |
| Rating for fusing ($t < 8.3\text{ms}$) | I^2t | 10.4 | | | | | | | A^2S |
| Typical Junction capacitance (Note 1) | C_J | 25 | | | | | | | pF |
| Typical Thermal resistance (Note 2) | $R_{\theta JC}$ | 40 | | | | | | | $^\circ\text{C} / \text{W}$ |
| Operating and Storage Temperature Range | T_J T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

NOTES :

1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts
2. Thermal Resistance From Junction to Ambient mounted on P.C.B with 0.5 x 0.5" (13x13mm) copper pads

DF005SF thru DF10SF

SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

RATING AND CHARACTERISTICS CURVES DF005SF THRU DF10SF

Fig. 1 - MAXIMUM FORWARD SURGE CURRENT

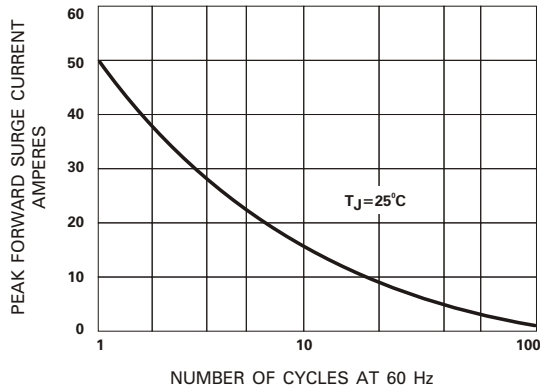


Fig. 2 - DERATING CURVE
OUTPUT RECTIFIED CURRENT

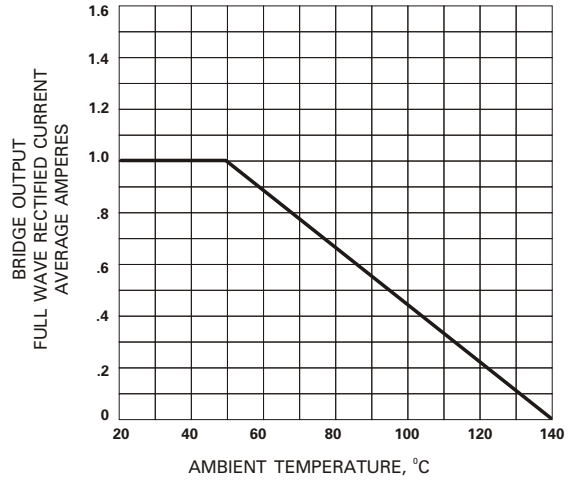


Fig. 3 - TYPICAL FORWARD
CHARACTERISTICS

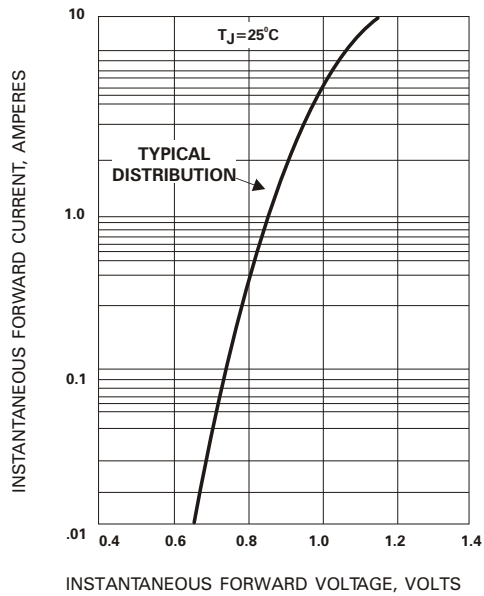


Fig. 4 - TYPICAL REVERSE
CHARACTERISTICS

