

# DF005S THRU DF10S

## SINGLE PHASE GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIER

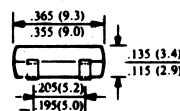
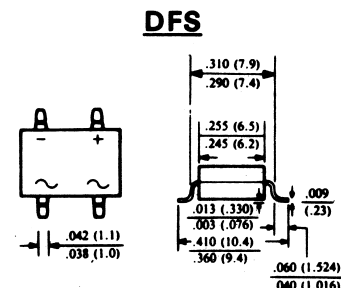
Voltage: 50 TO 1000V CURRENT:1.0A

### FEATURES

- For surface mount application
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 50A peak

### MECHANICAL DATA

- Terminal:** Plated leads solderable per MIL-STD 202E, method 208C
- Case:** UL-94 Class V-0 recognized Flame Retardant Epoxy
- Polarity:** Polarity symbol marked on body
- Mounting position:** any



Dimensions in inches and (millimeters)

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Single-phase, half-wave, 60HZ, resistive or inductive load rating at 25 °C , unless otherwise stated, for capacitive load, derate current by 20%)

|   | SYMBOL             | DF005S      | DF01S | DF02S | DF04S | DF06S | DF08S | DF10S | units |
|---|--------------------|-------------|-------|-------|-------|-------|-------|-------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>rrm</sub>   | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | v     |
| Maximum RMS Voltage   | V <sub>rms</sub>   | 35          | 70    | 140   | 280   | 420   | 560   | 700   | v     |
| Maximum DC blocking Voltage   | V <sub>dc</sub>    | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | v     |
| Maximum Average Forward Rectified current at Ta=40 °C                             | I <sub>f(av)</sub> | 1           |       |       |       |       |       |       | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I <sub>fsm</sub>   | 50          |       |       |       |       |       |       | A     |
| Maximum Instantaneous Forward Voltage at forward current 1.0A                     | V <sub>f</sub>     | 1.1         |       |       |       |       |       |       | V     |
| Maximum DC Reverse Voltage Ta=25 °C   | I <sub>r</sub>     | 10.0        |       |       |       |       |       |       | μ A   |
| at rated DC blocking voltage Ta=125 °C  |                    | 500         |       |       |       |       |       |       | mA    |
| Typical Junction Capacitance  | C <sub>j</sub>     | 25          |       |       |       |       |       |       | pF    |
| Operating Temperature Range   | T <sub>j</sub>     | -55 to +125 |       |       |       |       |       |       | °C    |
| Storage and operation Junction Temperature  | T <sub>stg</sub>   | -55 to +150 |       |       |       |       |       |       | °C    |

Note:

1. Measure at 1MHZ and applied reverse voltage of 4.0 volt

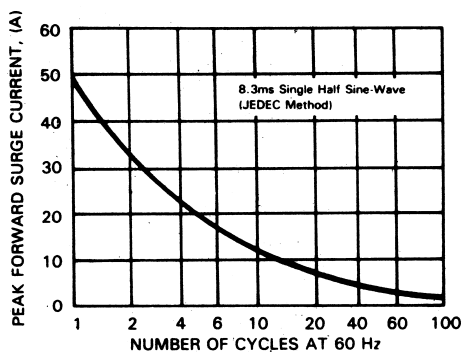
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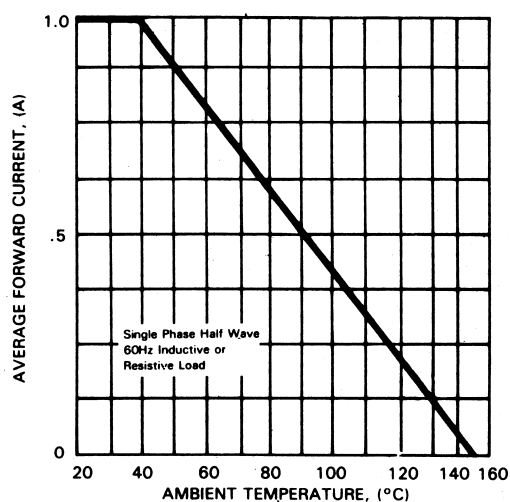
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### RATINGS AND CHARACTERISTIC CURVES DF005S THRU DF10S

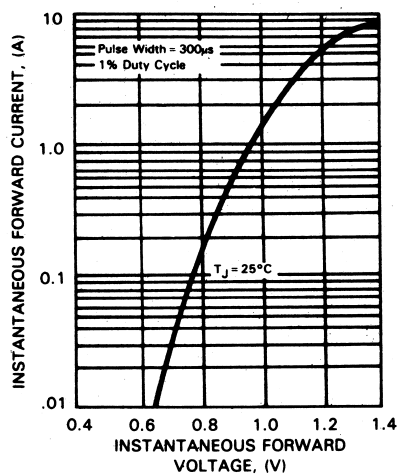
**FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.4-TYPICAL REVERSE CHARACTERISTICS**

