

## DF005S THRU DF10S

**SINGLE PHASE GLASS  
PASSIVATED SURFACE MOUNT BRIDGE  
RECTIFIER**

**VOLTAGE:50 TO 1000V**

**CURRENT:1.0A**



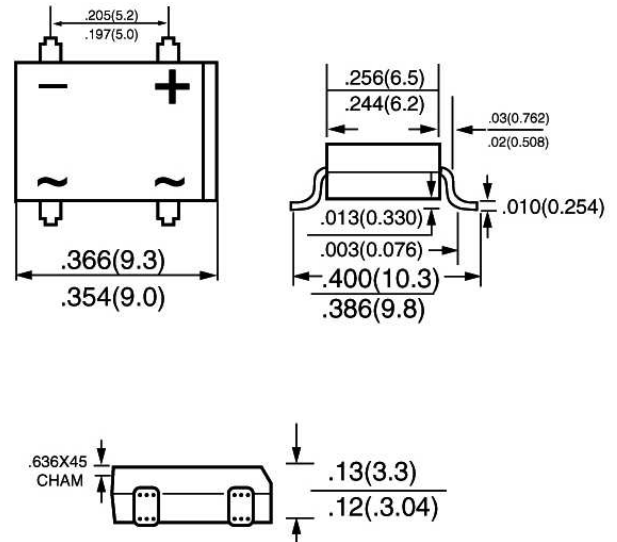
### FEATURE

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

### DFS



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%)

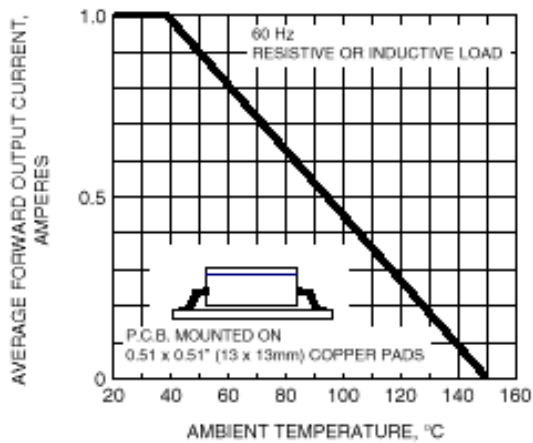
	SYMBOL	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta =40°C	I <sub>f(av)</sub>	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	50.0							A
Maximum Instantaneous Forward Voltage at forward current 1.0A	V <sub>f</sub>	1.1							V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I <sub>r</sub>	10.0 500.0							μA mA
Typical Junction Capacitance	C <sub>j</sub>	25.0							Pf
Operating Temperature Range	T <sub>j</sub>	-55 to +125							°C
Storage and Operating Junction Temperature	T <sub>stg</sub>	-55 to +150							°C

Note:

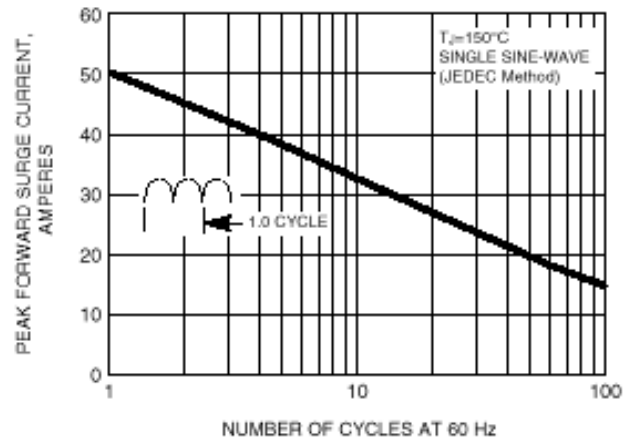
1. Measured at 1.0 MHz and applied voltage of 4.0 volt

## RATINGS AND CHARACTERISTIC CURVES DF005S THRU DF10S

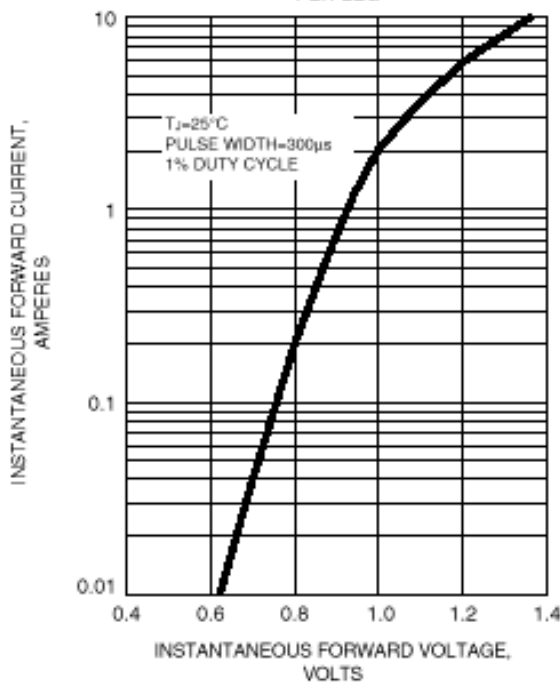
**FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT**



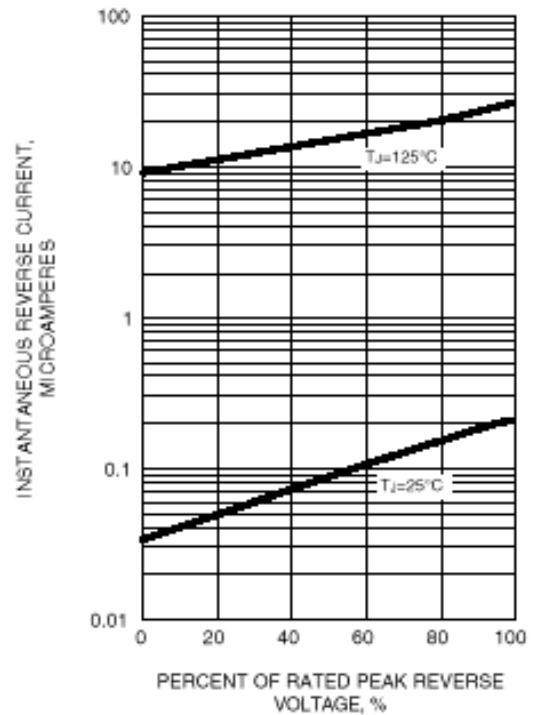
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG**



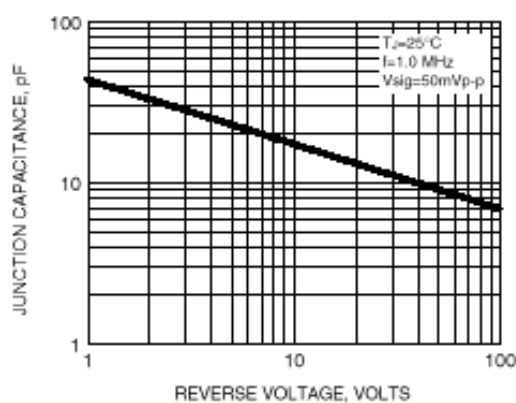
**FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

