



## DF005 THRU DF10

Single Phase 1.0 AMPS.  
Silicon Bridge Rectifiers

Voltage Range  
50 to 1000 Volts  
Current  
1.0 Amperes

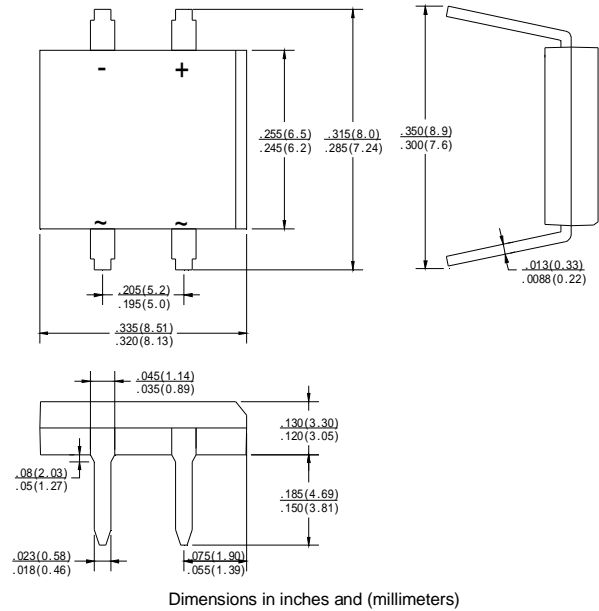
DB

### Features

- UL Recognized File # E-230084
- Ideal for printed circuit board
- Reliable low cost construction technique results in inexpensive product
- High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension

### Mechanical Data

- Case: Molded plastic
- Lead: solder plated
- Polarity: As marked



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number		DF005	DF01	DF02	DF04	DF06	DF08	DF10	UNITS
Maximum Repetitive 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 @T <sub>A</sub> = 40°C	I(AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage @ 1.0A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @ TA=25°C rated DC blocking voltage per leg TA = 125°C	I <sub>R</sub>	10 500							μ A
Typical Thermal Resistance (Note)	R θ <sub>JA</sub>	40							°C/W
	R θ <sub>JL</sub>	15							
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

**NOTE:** Thermal Resistance from Junction to Ambient and from Junction to Lead Mounted on P.C.B. with 0.47×0.47" (12×12mm) Copper Pads.

# RATING AND CHARACTERISTIC CURVES DF005 THRU DF10

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMMENT

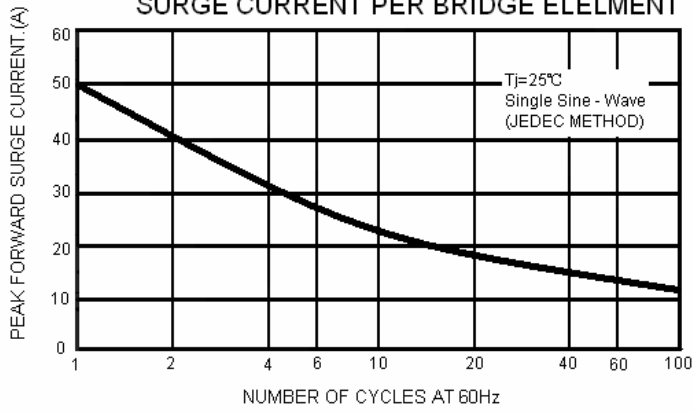


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

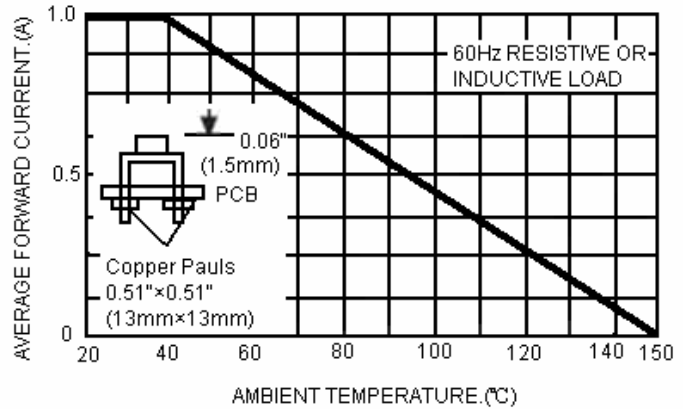


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

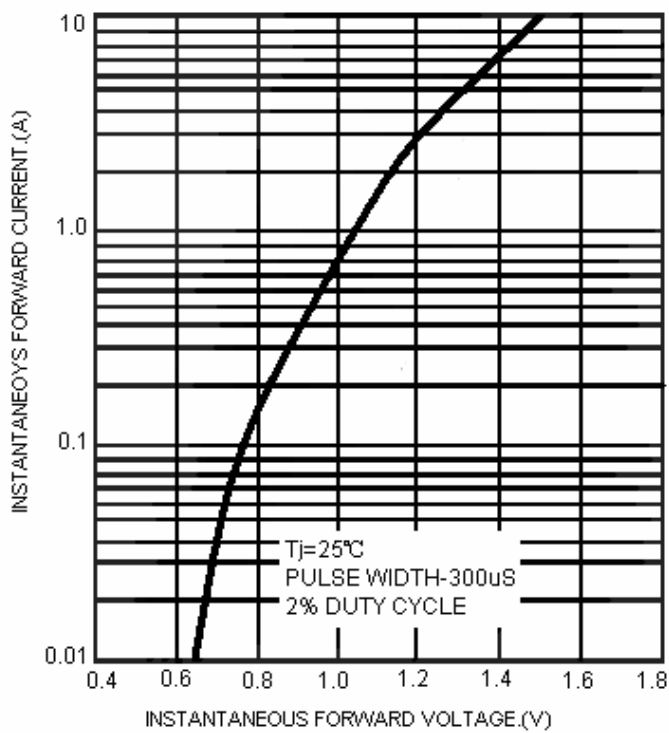


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

