

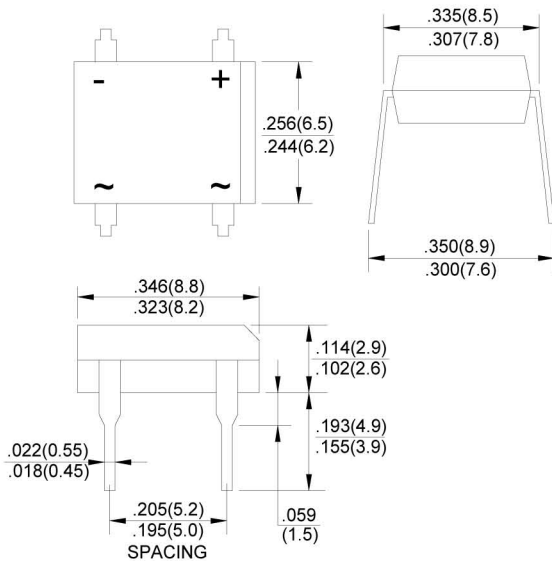
# SEMICONDUCTOR

## DF005G thru DF10G

### GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts

FORWARD CURRENT - 1.0Amperes



Dimensions in inches and (millimeters)

**Package:DB**

### 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%



CHARACTERISTICS	SYMBOL	DF005G	DF01G	DF02G	DF04G	DF06G	DF08G	DF10G	UNIT
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 @T <sub>A</sub> =40°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	50							A
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =125°C	I <sub>R</sub>	10 500							uA
I <sup>2</sup> t Rating for Fusing(t<8.3ms)	I <sup>2</sup> t	10.4							A <sup>2</sup> s
Typical Junction Capacitance Per Element(Note1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	40							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

Note: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 0.5\*0.5"(13\*13mm)copper pads.



## SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS RATING AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

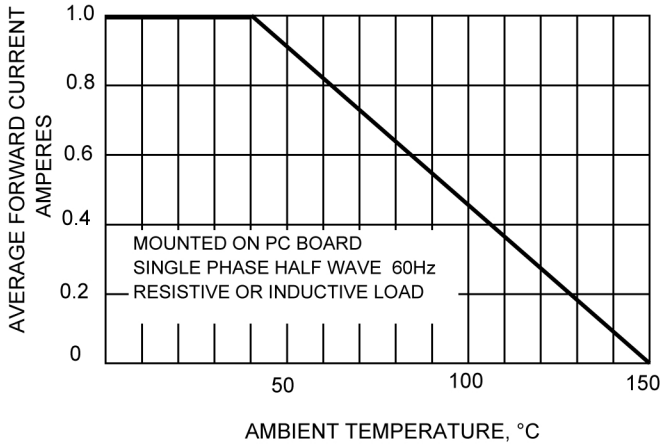


FIG.2-MXIMUM NON-REPETITIVE SURGE CURRENT

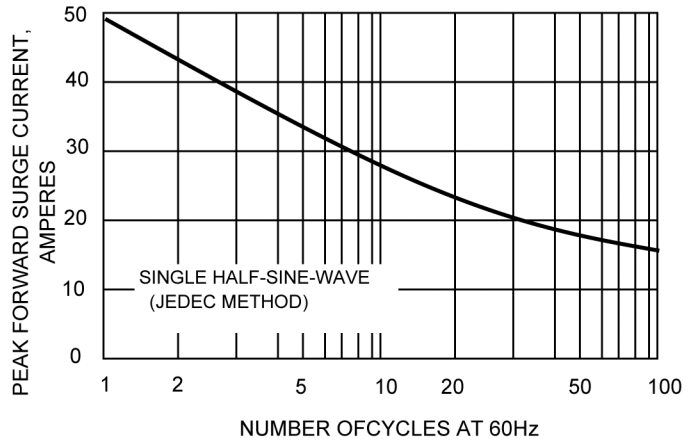


FIG.3-TYPICAL JUNCTION CAPACITANCE

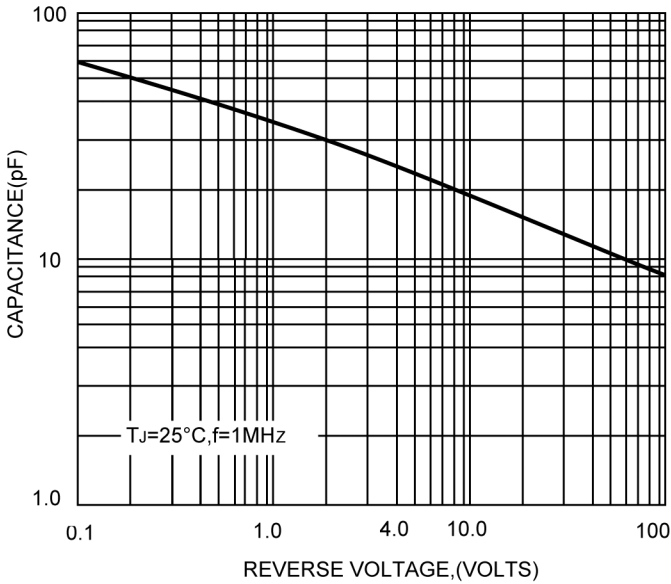


FIG.4-TYPICAL FORWARD CHARACTERISTICS

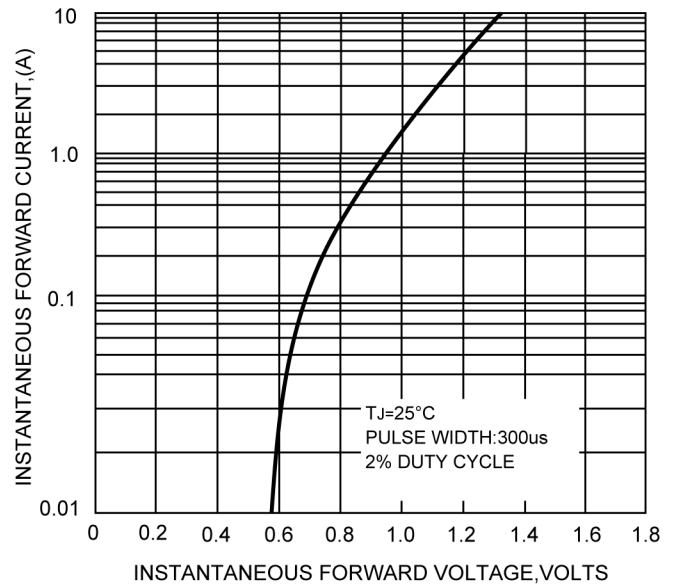


FIG.5-TYPICAL REVERSE CHARACTERISTICS

