

### Surface Mount Glass Passivated Bridge Rectifiers

**(Pb)** Lead(Pb)-Free

#### Features:

- \*For Surface Mount Application
- \*Glass Passivated Chip
- \*Low Reverse Leakage Current
- \*Low Forward Voltage Drop And High Current Capability
- \*Plastic Material Has UL Flammability Classification 94V-0

#### Mechanical Data

- \*Case : Molded Plastic
- \*Polarity :As marked on Body
- \*Weight : 0.02 Ounce ,0.38 grams

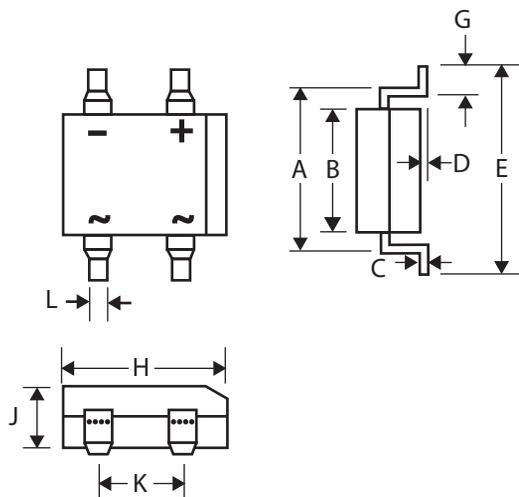
**REVERSE VOLTAGE  
50 TO 1000 VOLTS  
FORWARD CURRENT  
1.0 AMPERE**



**DF-S**

### DF-S Outline Dimensions

Unit:mm



DF-S		
Dim	Min	Max
A	7.40	7.90
B	6.20	6.50
C	0.009	0.25
D	0.076	0.33
E	-	10.40
G	1.02	1.53
H	8.13	8.51
J	2.40	3.40
K	5.00	5.20
L	1.00	1.20

## Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

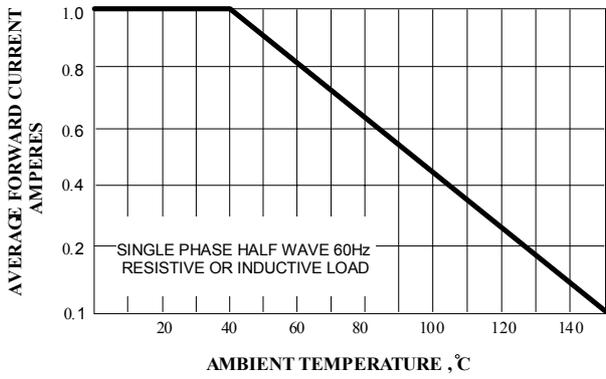
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TC=40°C	IF(AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	50							A
Maximum Instantaneous At 1.0A DC	VF	1.10							V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR	1.0 500							uA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	25							P <sub>F</sub>
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	40							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to+150							°C
Storage Temperature Range	TSTG	-55 to+150							°C

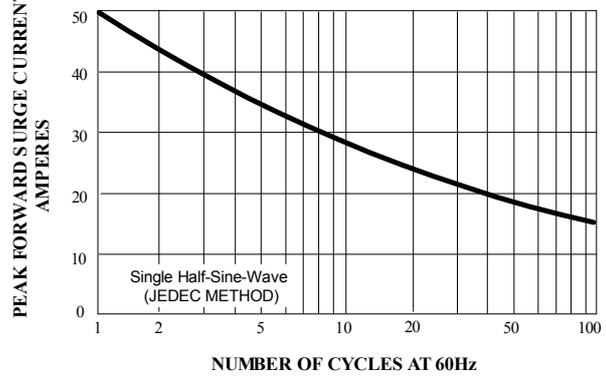
NOTES: 1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

2.Thermal Resistance from junction to ambient mounted on P.C.B. with 13\*13mm Copper pads.

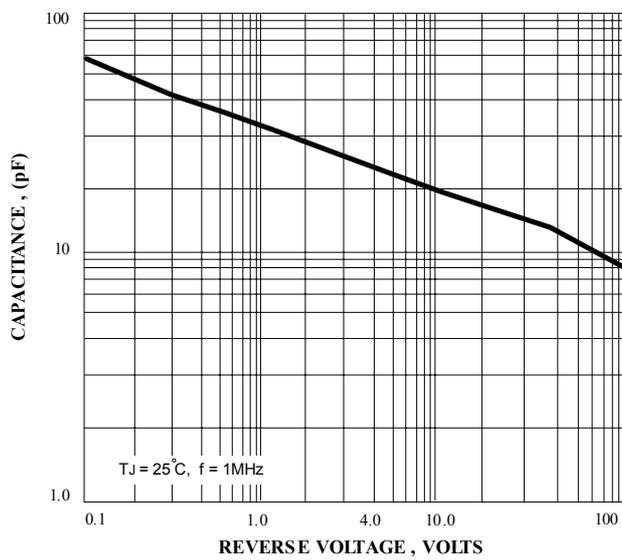
**FIG.1 - FORWARD CURRENT DERATING CURVE**



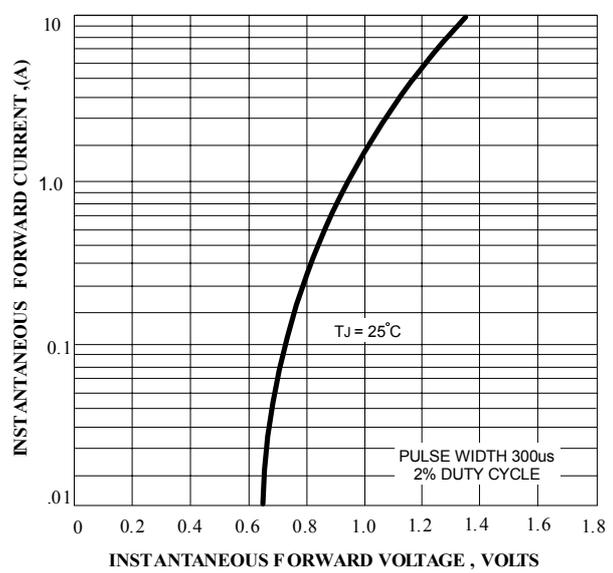
**FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3 - TYPICAL JUNCTION CAPACITANCE**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

