

## DF2005S-G Thru. DF210S-G

Reverse Voltage: 50 to 1000V

Forward Current: 2.0A

RoHS Device

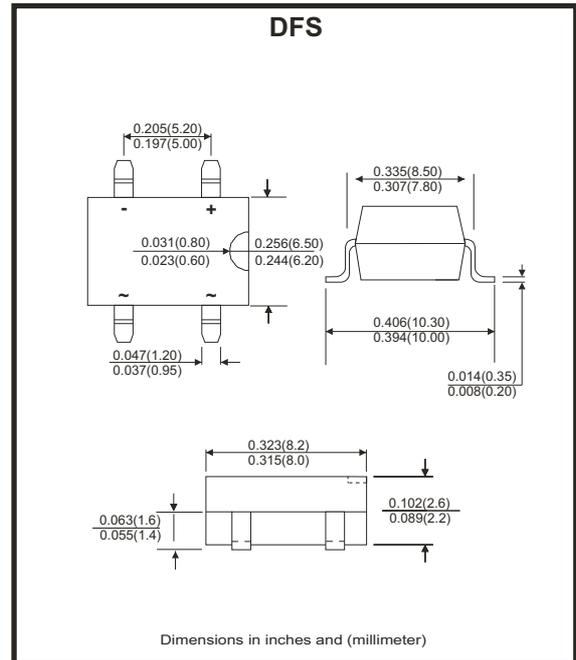


### Features

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop,high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0

### Mechanical Data

- Polarit:As marked on Body
- Weight:0.02 ounces, 0.38 grams
- Mounting position:Any



### 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%

Parameter	Symbol	DF2005S-G	DF201S-G	DF202S-G	DF204S-G	DF206S-G	DF208S-G	DF210S-G	Unit
	Marking	DF2005S	DF201S	DF202S	DF204S	DF206S	DF208S	DF210S	
Maximum Reverse Peak Repetitive Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @ $T_A=40^{\circ}C$	$I_{(AV)}$	2.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	$I_{FSM}$	60							A
$I^2 t$ Rating for Fusing ( $t < 8.3ms$ )	$I^2 t$	10.4							$A^2 s$
Maximum Forward Voltage at 2.0A DC	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	10 500							$\mu A$
Typical Junction Capacitance Per Element (Note 1)	$C_J$	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Operating Temperature Range	$T_J$	-55 ~ +150							$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 ~ +150							$^{\circ}C$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC
2. Unit mounted on P.C.B with 0.50"×0.50" (13×13mm) copper pads.

## Rating and Characteristics Curves (DF2005S-G Thru. DF210S-G)

FIG. 1-Derating Curve For Output Rectified Current

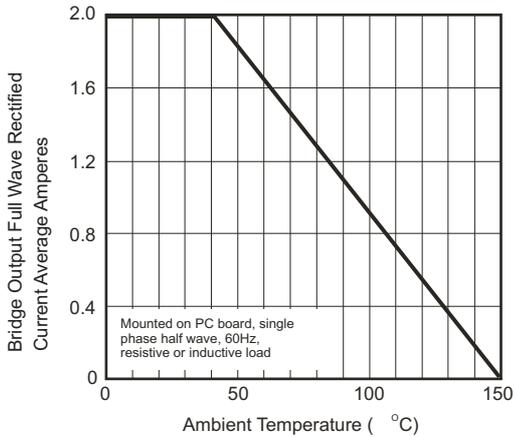


Fig. 3- Typical Junction Capacitance

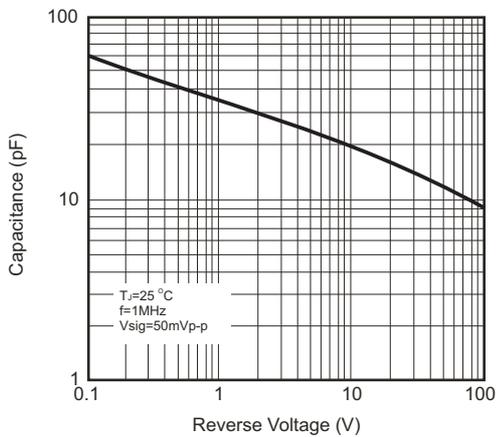


Fig. 5- Typical Reverse Characteristics

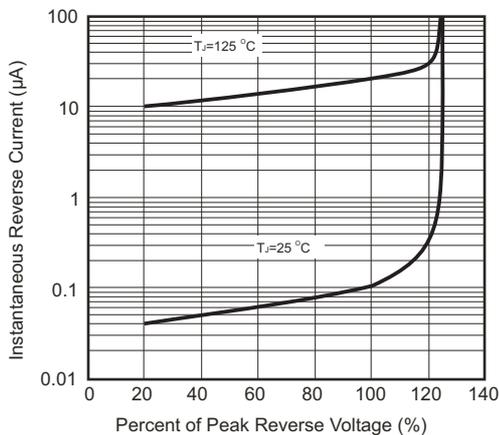


FIG. 2-Maximum Non-Repetitive Peak Forward Surge Current

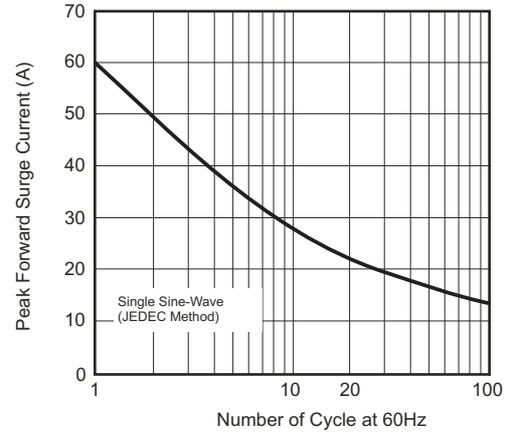


Fig. 4- Typical Forward Characteristics

