

SMD Glass Passivated Bridge Rectifiers



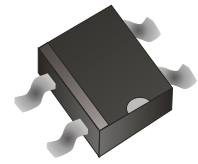
SMD Diodes Specialist

DF005S-G Thru. DF10S-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.0A

RoHS Device

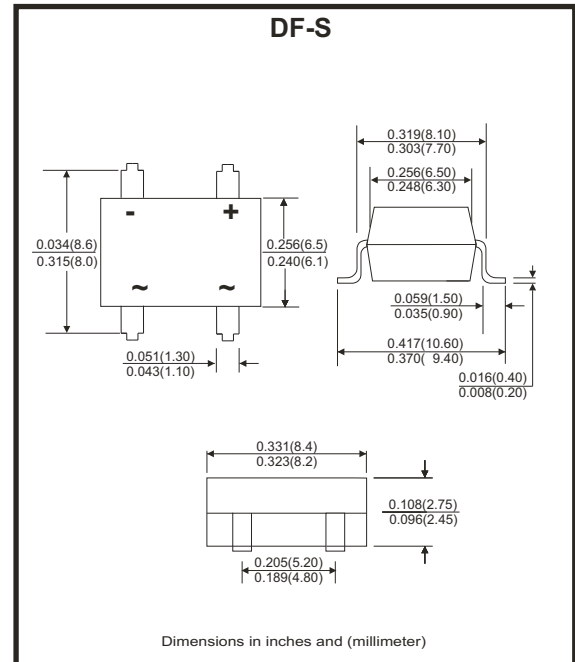


Features

- 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
- Lead tin Pb/Sn copper
- The plastic material has UL flammability classification 94V-0

Mechanical Data

- Polarit:As marked on Body
- Weight:0.016 ounces, 0.45 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	DF005S-G	DF01S-G	DF02S-G	DF04S-G	DF06S-G	DF08S-G	DF10S-G	Unit
	marking	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	
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 @ $T_A=40^{\circ}C$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	50							A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	10.4							A ² s
Maximum Forward Voltage at 1.0A DC	V_F	1.1							V
Maximum Reverse Current @ $T_J=25^{\circ}C$ At Rated DC Blocking Voltage @ $T_J=125^{\circ}C$	I_R	10 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}C/W$
Operating Temperature Range	T_J	$-55 \sim +150$							$^{\circ}C$
Storage Temperature Range	T_{STG}	$-55 \sim +150$							$^{\circ}C$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Thermal resistance from junction to ambient mounted on P.C.B with 0.5"×0.5" (13×13mm) copper pads.

Rating and Characteristics Curves (DF005S-G Thru. DF10S-G)

Fig.1- Forward Current Derating Curve

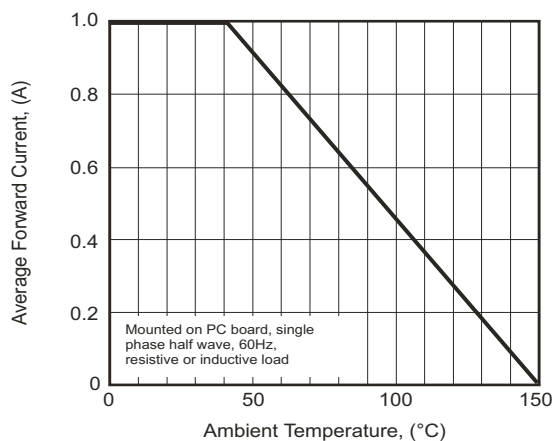


Fig.2- Maximum Non-repetitive Surge Current

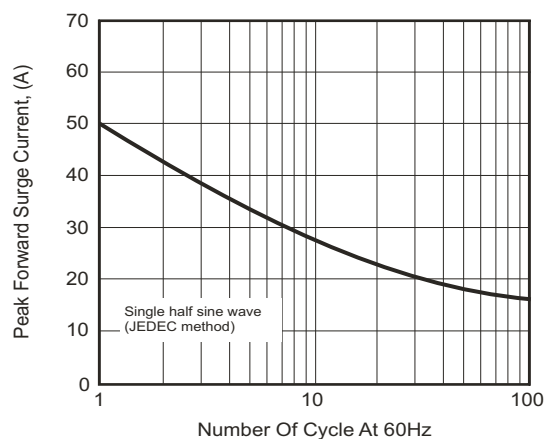


Fig.3- Typical Junction Capacitance

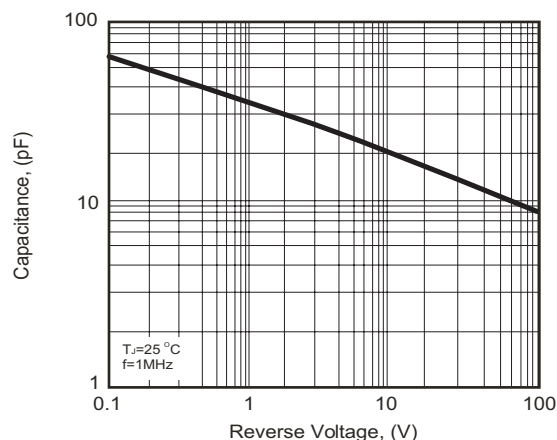


Fig.4- Typical Forward Characteristics

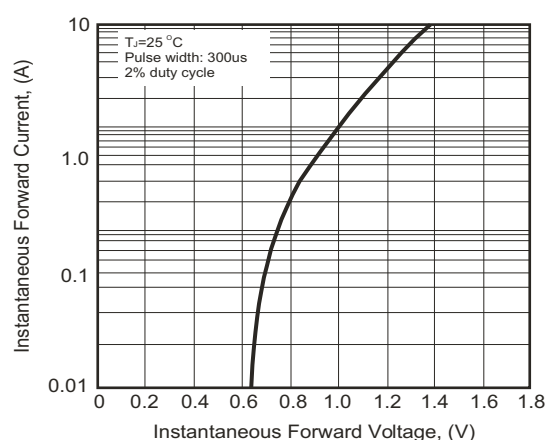
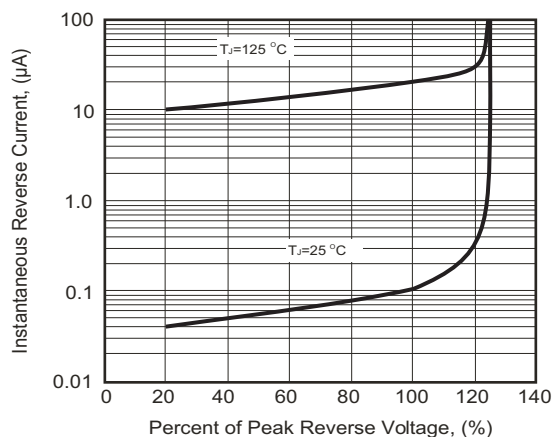
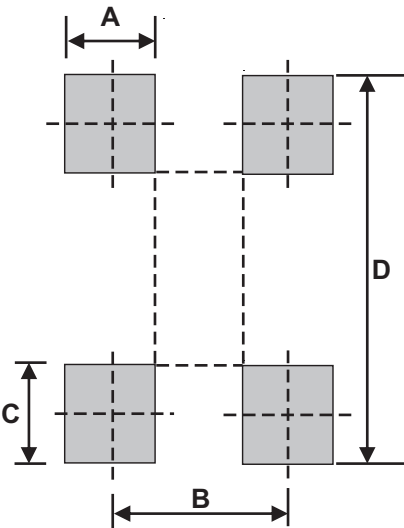


Fig.5- Typical Reverse Characteristics



Suggested PAD Layout

SIZE	DF-S	
	(mm)	(inch)
A	1.20 MIN	0.047 MIN
B	5.2~5.0	0.205~0.197
C	1.52 MIN	0.060 MIN
D	10.26 MAX	0.404 MAX



Standard Package

Case Type	TUBE	BOX SIZE	BOX	CARTON
	(EA)	(mm)	(EA)	(EA)
DF-S	50	450*145*70	5000	30000

