

SMD Glass Passivated Bridge Rectifiers



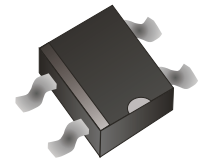
SMD Diodes Specialist

DF005S-G Thru. DF10S-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.0A

RoHS Device

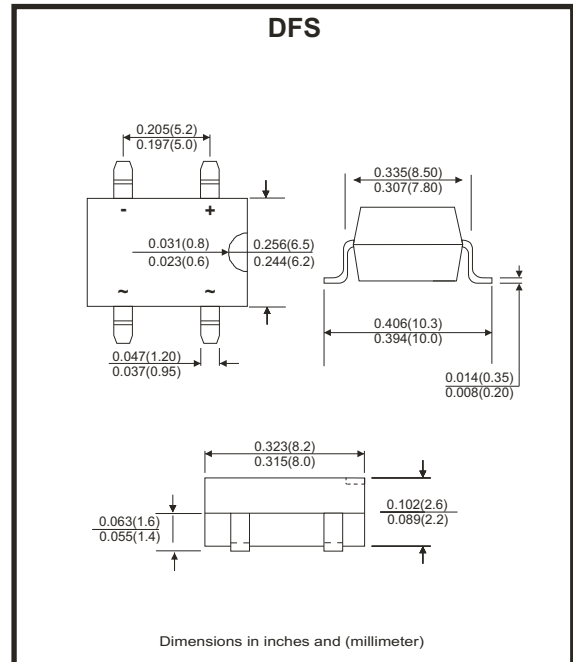


Features

- 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:0.02 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	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 @ $T_A=40\text{ }^{\circ}\text{C}$	$I_{(AV)}$	1.0							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	50							A
$I^2 t$ Rating for Fusing ($t < 8.3\text{ms}$)	$I^2 t$	10.4							$\text{A}^2 \text{s}$
Maximum Forward Voltage at 1.0A DC	V_F	1.1							V
Maximum Reverse Current @ $T_J=25\text{ }^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_J=125\text{ }^{\circ}\text{C}$	I_R	10 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^{\circ}\text{C/W}$
Operating Temperature Range	T_J	-55 ~ +150							$^{\circ}\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150							$^{\circ}\text{C}$

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V.
2. Unit mounted on P.C.B with 0.51"×0.51" (13×13mm) copper pads.

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

Fig. 1 Forward Current Derating Curve

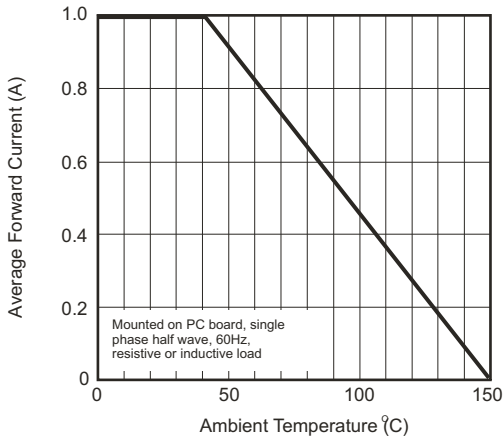


Fig. 2 Maximum Non-repetitive Surge Current

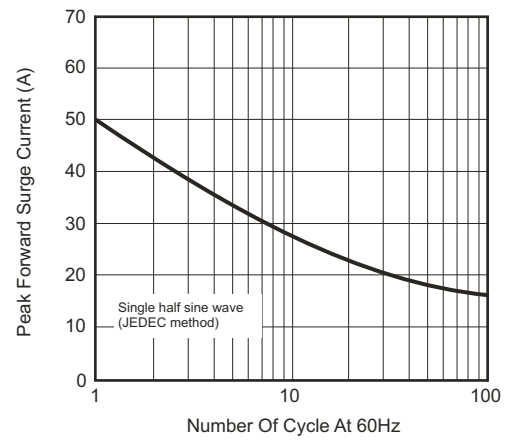


Fig. 3- Typical Junction Capacitance

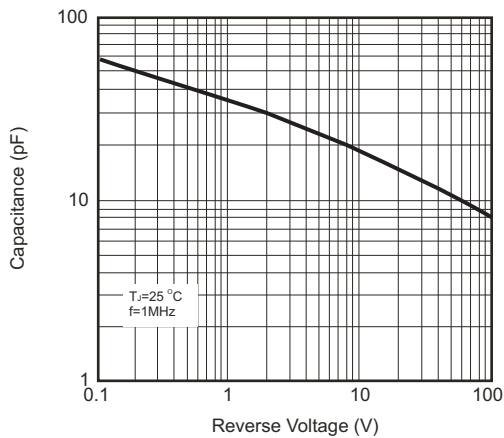


Fig. 4 Typical Forward Characteristics

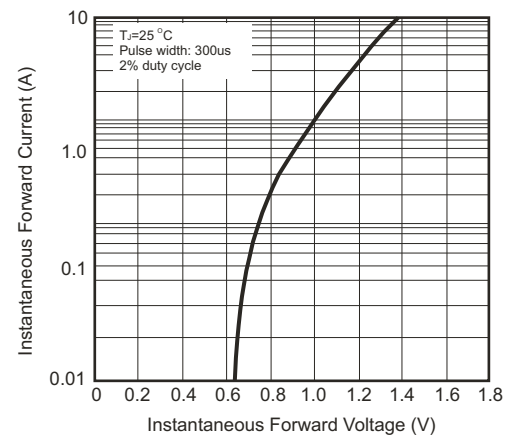


Fig. 5- Typical Reverse Characteristics

