

SMD Glass Passivated Bridge Rectifiers



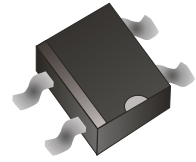
SMD Diodes Specialist

DF15005S-G Thru. DF1510S-G

Reverse Voltage: 50 to 1000V

Forward Current: 1.5A

RoHS Device

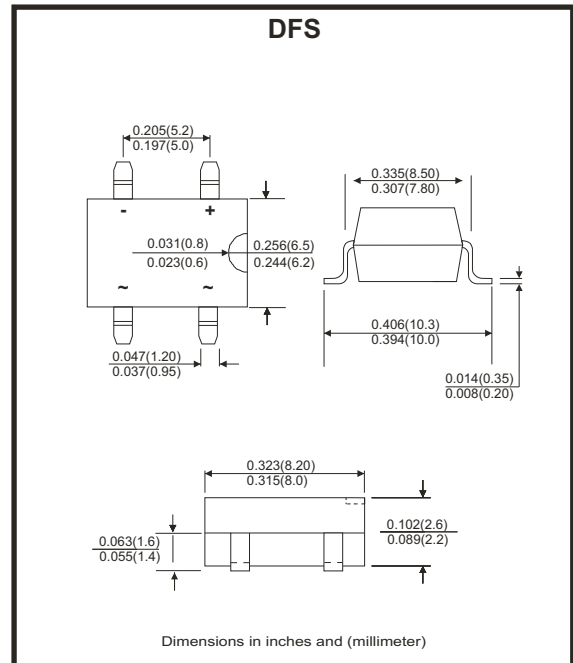


Features

- 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	DF 15005S-G	DF 1501S-G	DF 1502S-G	DF 1504S-G	DF 1506S-G	DF 1508S-G	DF 1510S-G	Unit
	Marking	DF15005S	DF1501S	DF1502S	DF1504S	DF1506S	DF1508S	DF1510S	
Maximum Recurrent Peak Reverse 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 @ $T_A=40^{\circ}C$	$I_{(AV)}$	1.5							A
Peak Forward Surage Current , 8.3ms Single Half Sine-Wave Super Imposed on Rated Load	I_{FSM}	50							A
$I^2 t$ Rating for Fusing ($t < 8.3ms$)	$I^2 t$	10.4							$A^2 s$
Maximum Forward Voltage at 1.5A DC	V_F	1.1							V
Maximum DC 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 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	$-55 \sim +150$							$^{\circ}C$
Storage Temperature Range	T_{STG}	$-55 \sim +150$							$^{\circ}C$

Notes:

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

Rating and Characteristics Curves (DF15005S-G Thru. DF1510S-G)

FIG. 1-Forward Current Derrent Curve

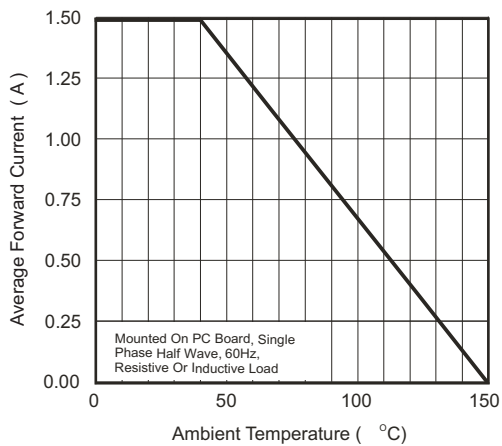


FIG. 2-Maximum Non-Repetitive Peak Forward Surge Current

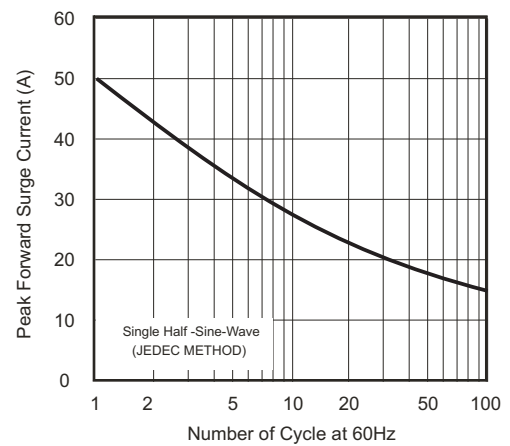


Fig. 3- Typical Junction Capacitance

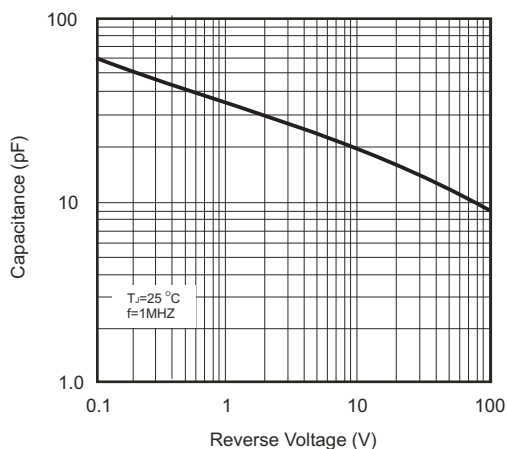


Fig. 4- Typical Forward Characteristics

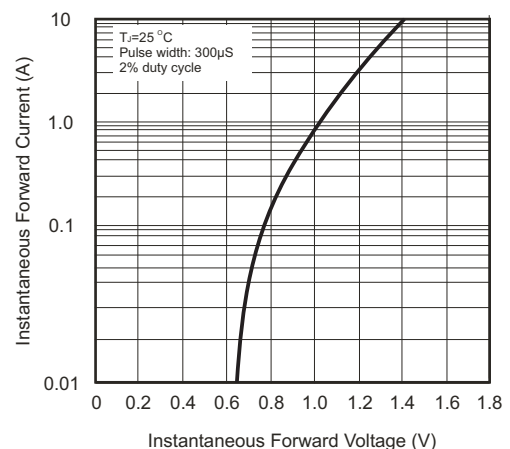


Fig. 5- Typical Reverse Characteristics

