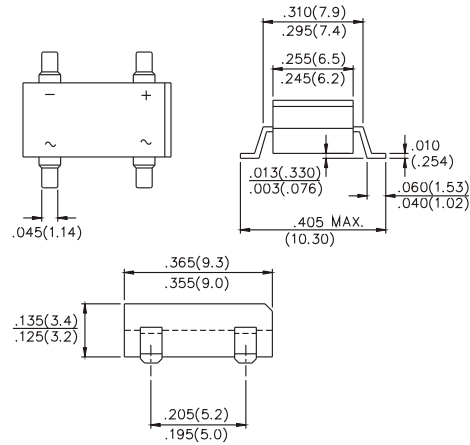
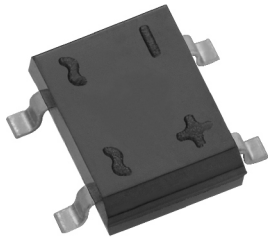


# DF15005S thru DF1510S

## SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS SINGLE-PHASE GLASS BRIDGE

REVERSE VOLTAGE - 50 TO 1000 VOLTS FORWARD CURRENT - 1.5 AMPERES



Dimensions in inches and (millimeters)

### FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded Plastic technique results in inexpensive product
- Lead in plated copper
- The plastic material has UL flammability Classification 94V-0

### MECHANICAL DATA

Polarity : As marked on body  
Weight : 0.02 ounce, 0.38gram  
Mounting position : Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temp. unless otherwise specified  
Single phase, half sine wave, 60Hz, resistive or inductive load  
For capacitive load, derate current by 20%

		DF 15005S	DF 1501S	DF 1502S	DF 1504S	DF 1506S	DF 1508S	DF 1510S	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge input Voltage	$V_{RMS}$	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current @ $T_A=40^\circ\text{C}$	$V_{(AV)}$	1.5							Amps
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	50							Amps
Maximum DC Forward Voltage at ADC	$V_F$	1.1							Volts
Maximum DC Reverse @ $T_J=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
$I^2t$ Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{S}$
Typical Junction capacitance per element (Note 1)	$C_J$	25							pF
Typical Thermal resistance (Note 2)	$R_{\theta JC}$	40							$^\circ\text{C} / \text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

#### NOTES :

1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0 Volts DC
2. Thermal Resistance From Junction to Ambient and from junction to lead mounted on P.C.B with 0.5 x 0.5" (13x13mm) copper pads.

# DF15005S thru DF1510S

## SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS SINGLE-PHASE GLASS BRIDGE

### RATING AND CHARACTERISTICS CURVES DF15005S THRU DF1510S

Fig. 1 - FORWAED CURRENT DERATING CURVE

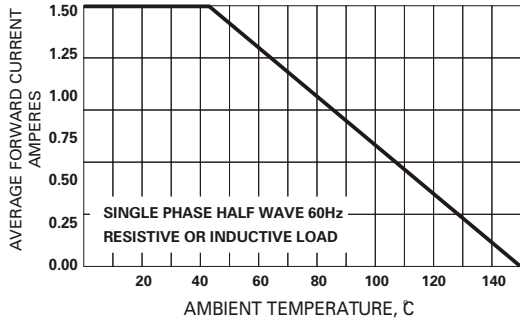


Fig. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

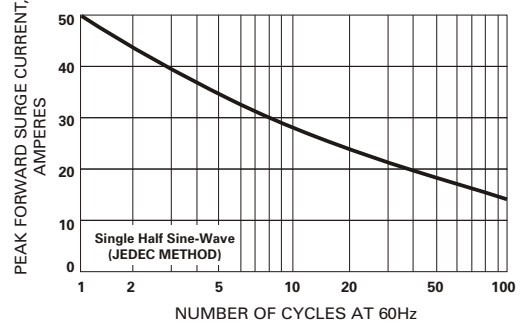


Fig. 3 - TYPICAL JUNCTION CAPACITANCE

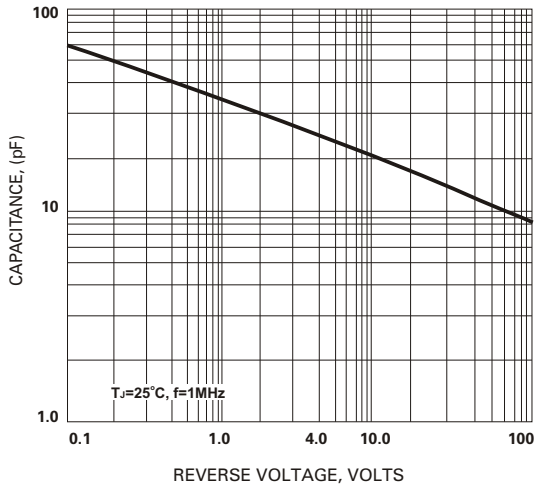


Fig. 4 - TYPICAL FORWARD CHARACTERISTICS

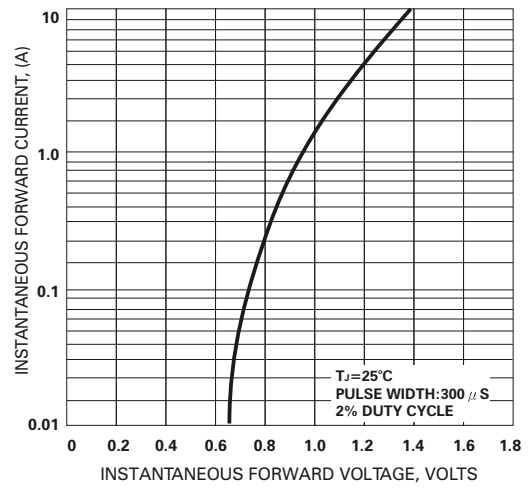


Fig. 5 - TYPICAL REVERSE CHARACTERISTICS

