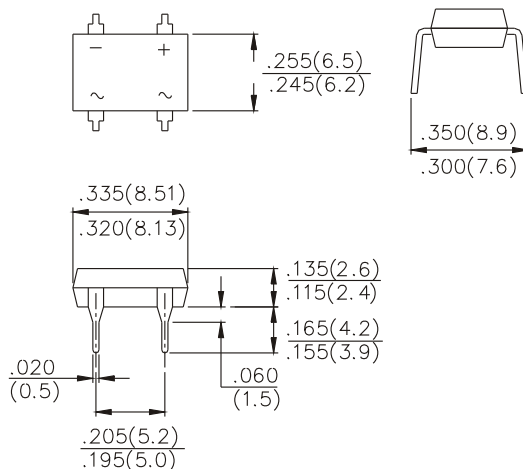


# DF2005 thru DF210

## SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

VOLTAGE - 50 TO 1000 VOLTS CURRENT - 2.0 AMPERES



### 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

Polarity: As marked on Body  
 Weight: 0.02 ounces, 0.38 grams  
 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%

	SYMBOL	DF2005	DF201	DF202	DF204	DF206	DF208	DF210	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	Volts
Maximum RMS 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 @ $T_A=40^\circ\text{C}$	$V_{(AV)}$	2.0							Amps
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	60							Amps
Maximum Instantaneous Forward Voltage Drop per Bridge Element at 1.0A	$V_F$	1.1							Volts
Maximum DC Reverse @ $T_A=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_R$	10 500							$\mu\text{A}$
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2t$	10.4							$\text{A}^2\text{S}$
Typical Junction capacitance (Note 1)	$C_J$	25							pF
Typical Thermal resistance (Note 2)	$R_{\theta JC}$	40							$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	$T_J$ $T_{STG}$	-55 to +150							$^\circ\text{C}$

#### NOTES :

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts
2. Thermal Resistance From Junction to Ambient mounted on P.C.B with 0.5 x 0.5" (13x13mm) copper pads

# DF2005 thru DF210

## SINGLE-PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

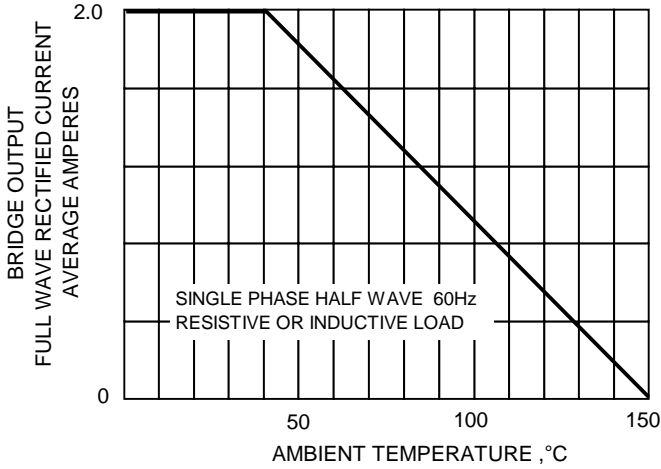


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

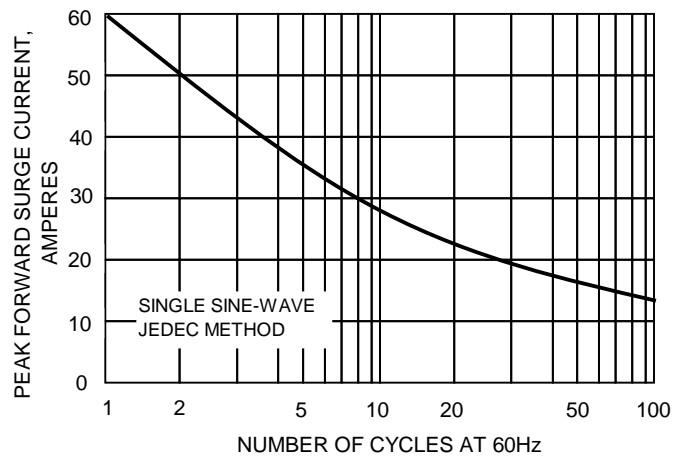


FIG.3-TYPICAL JUNCTION CAPACITANCE

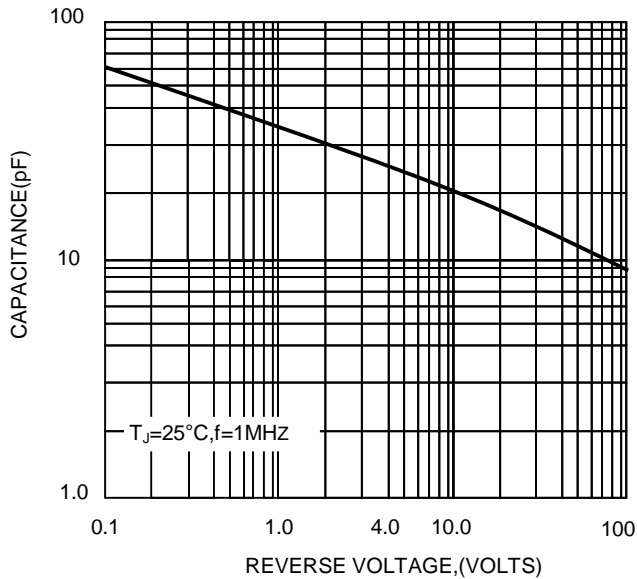


FIG.4-TYPICAL FORWARD CHARACTERISTICS

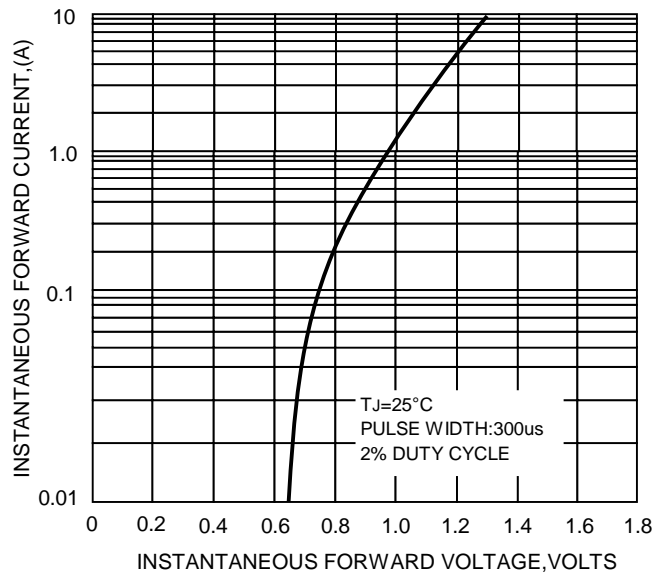


FIG.5-TYPICAL REVERSE CHARACTERISTICS

