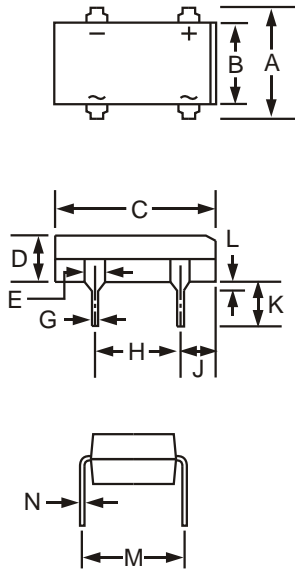


## DF005 THRU DF10

### SINGLE - PHASE GLASS PASSIVATED BRIDGE RECTIFIER VOLTAGE - 50 TO 1000 VOLTS    CURRENT - 1.0 AMPERE



DF		
Dim	Min	Max
A	7.24	8.00
B	6.20	6.50
C	8.12	8.51
D	3.05	3.30
E	0.89	1.14
G	0.46	0.58
H	5.00	5.20
J	1.39	1.90
K	3.81	4.69
L	1.27	2.03
M	7.60	8.90
N	0.22	0.33

All Dimensions in mm

### FEATURES

- Glass passivated junction
- Surge overload rating to 50 amperes peak
- Ideal for printed circuit board applications
- Low forward voltage drop
- Reliable low cost construction utilizing molded plastic technique
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High temperature soldering guaranteed: 260°C/10 seconds at 5lbs. (2.3kg) tension

### MECHANICAL DATA

Case: Molded plastic body over passivated junction  
 Terminals: Plated lead solderable per MIL-STD-202, method 208  
 Polarity: Polarity symbols marked on body  
 Weight: 0.04 ounce, 1.0 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified  
 Sing phase ,half-wave ,60Hz, resistive or inductive load  
 For capacitive load, derate current by 20%

	SYMBOL	DF005	DF01	DF02	DF04	DF06	DF08	DF10	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 $T_A = 40^\circ C$	$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	50							Amps
Maximum Instantaneous Forward Voltage Drop Per Bridge Element at 1.0A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	$I_R$	10 500							$\mu A$
Rating for Fusing ( $t < 8.3ms$ )	$I^2t$	10.4							$A^2s$
Typical Junction Capacitance (NOTE 1)	$C_J$	25							pF
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	74							$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	- 55 to + 150							$^\circ C$

**NOTES:**

1. Measured at 1.0MHz 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" (13 x 13mm) copper pads



## DF005 THRU DF10

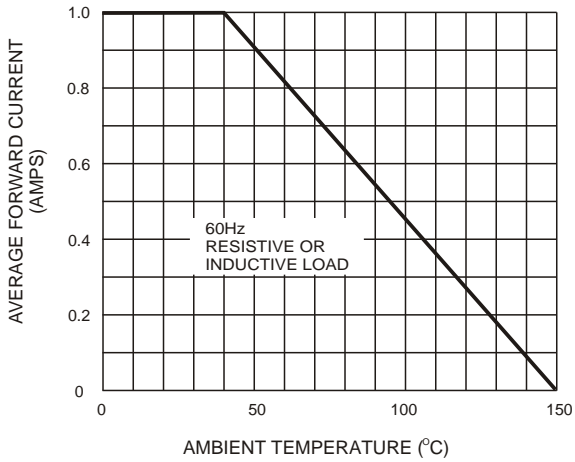


Figure 1. Typical Forward Current Derating Curve

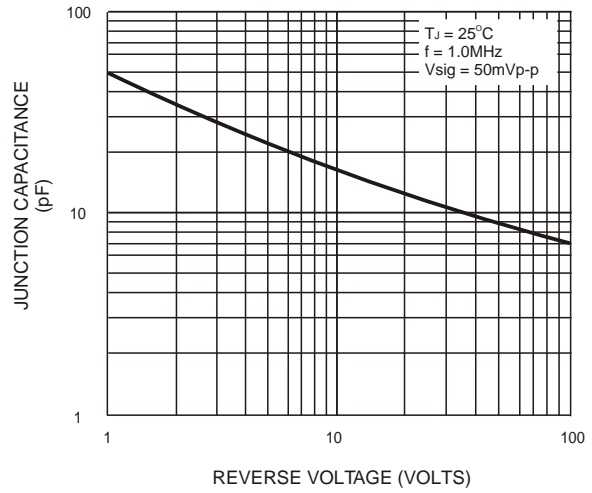


Figure 2. Typical Junction Capacitance Per Bridge Element

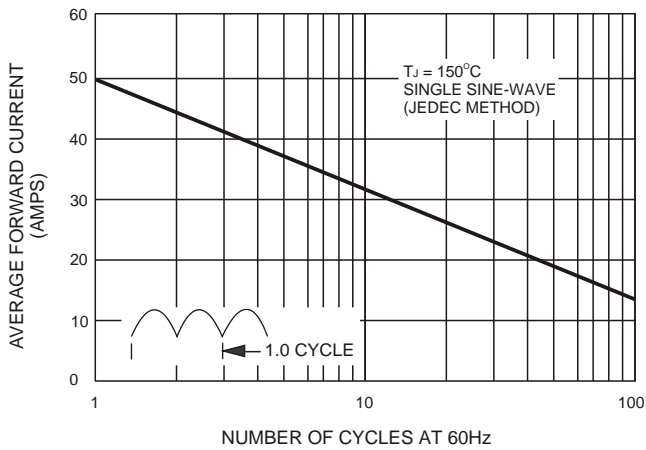


Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

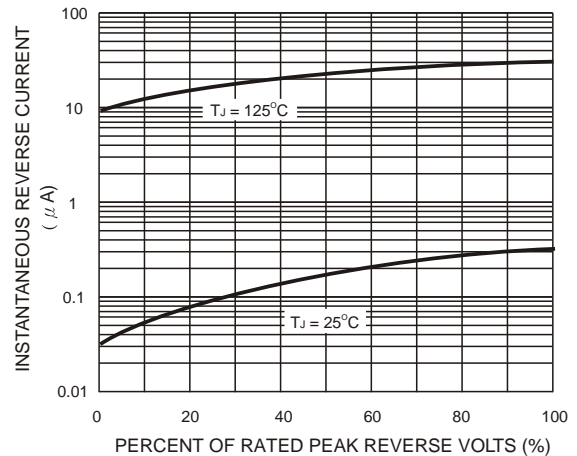


Figure 4. Typical Reverse Leakage Characteristics Per Bridge Element

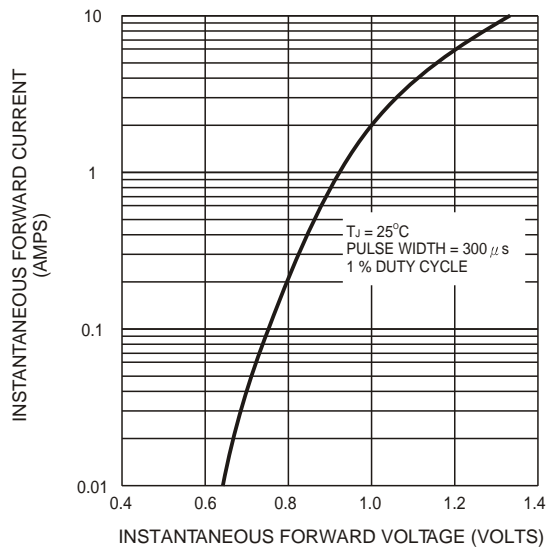


Figure 5. Typical Forward Characteristics Per Bridge Element