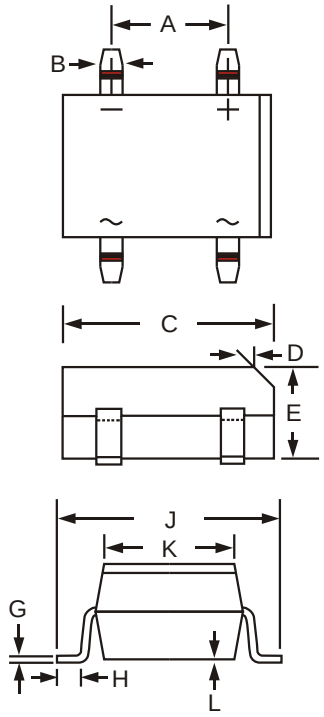
DF005S THRU DF10S

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



DFS		
Dim	Min	Max
A	5.00	5.20
B	1.02	1.20
C	8.13	8.51
D	45°C	
E	3.05	3.30
G	0.24	0.33
H	1.02	1.52
J	9.80	10.30
K	6.20	6.50
L	0.08	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	DF005S	DF01S	DF02S	DF04S	DF06S	DF08S	DF10S	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°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 T_A = 25°C at Rated DC Blocking Voltage T_A = 125 °C	I_R	10 500							μA
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							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150							°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

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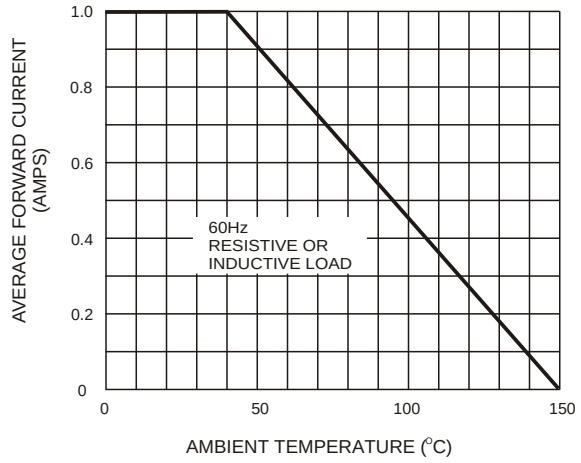

Figure 1. Typical Forward Current Derating Curve

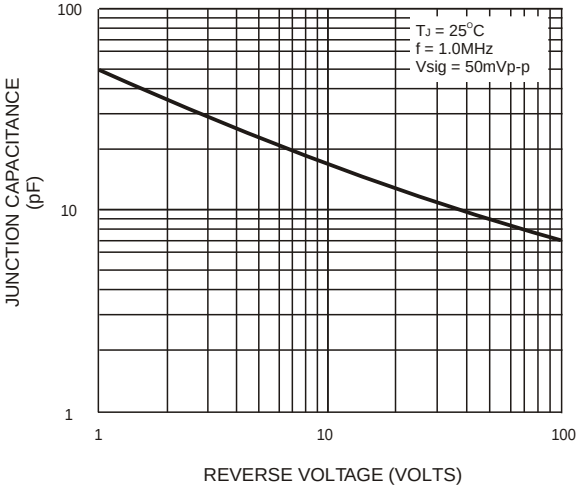

Figure 2. Typical Junction Capacitance Per Bridge Element

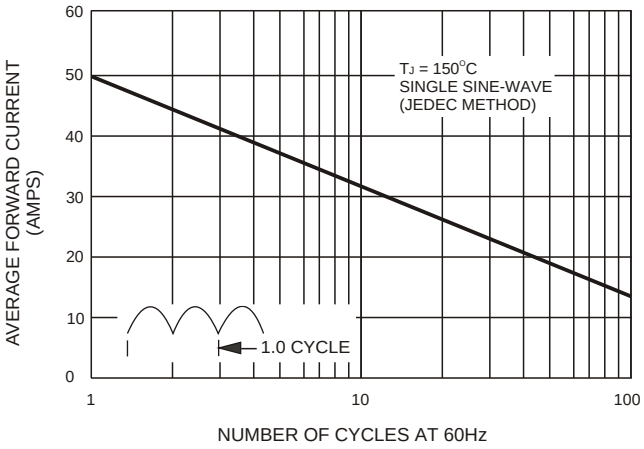

Figure 3. Maximum Non-repetitive Peak Forward Surge Current Per Bridge Element

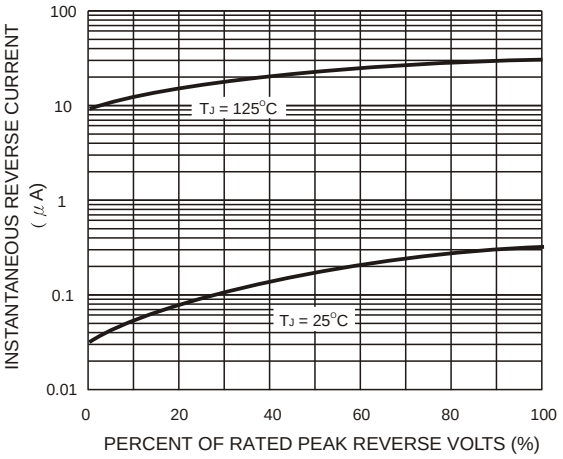

Figure 4. Typical Reverse Leakage Characteristics Per Bridge Element

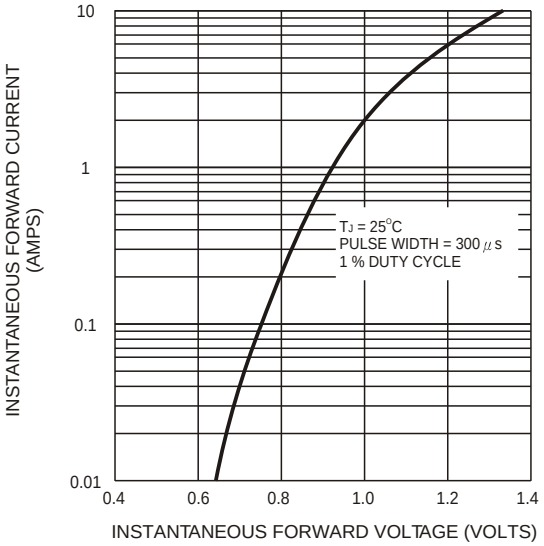

Figure 5. Typical Forward Characteristics Per Bridge Element