

DF005S - DF10S

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

VOLTAGE RANGE: 50-1000V CURRENT: 1.0 A

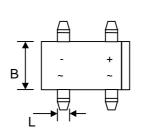
Features

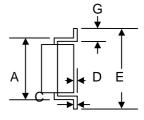
- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Surge Current Capability
- Designed for Surface Mount Application
- Plastic Material UL Recognition Flammability Classification 94V-O

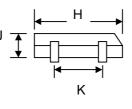
Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Weight: 0.38 grams (approx.)
- Mounting Position: Any
- Marking: Type Number









DF-S							
Dim	Min	Max					
Α	7.40	7.90					
В	6.20	6.50					
С	0.009	0.25					
D	0.076	0.33					
E		10.40					
G	1.02	1.53					
Н	8.13	8.51					
J*	3.20	3.40					
K	5.0	5.20					
L	1.00	1.20					
All Dimensions in mm							

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

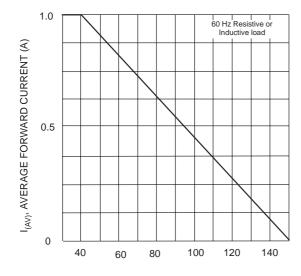
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 005S	DF 01S	DF 02S	DF 04S	DF 06S	DF 08S	DF 10S	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current $@T_A = 40^{\circ}C$	lo	1.0					А		
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	30						A	
Forward Voltage per element $@I_F = 1.0A$	Vfm	1.1							V
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	Iгм	10 500					μA		
Typical Junction Capacitance per element (Note 1)	Cj	25						pF	
Typical Thermal Resistance (Note 2)	R∂JA	110						K/W	
Operating and Storage Temperature Range	Tj, TSTG	-65 to +150							°C

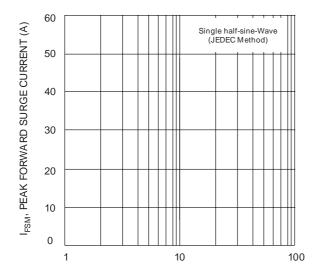
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

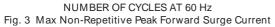
2. Thermal resistance junction to ambient mounted on PC board with 5.0mm² (0.03mm thick) land areas.

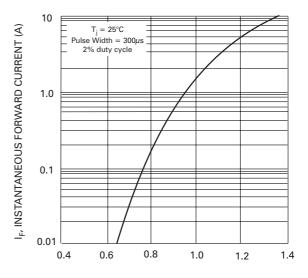




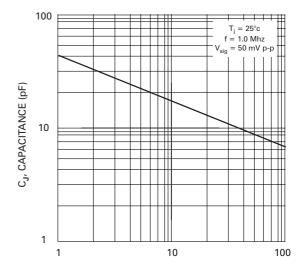




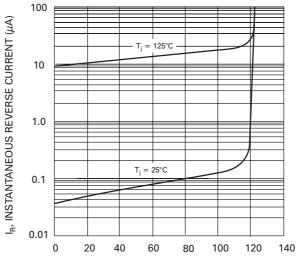




V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typ Forward Characteristics (per element)



V_R, REVERSE VOLTAGE (V) Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typ Reverse Characteristics (per element)