

DF005S - DF10S

1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass Passivated Die Construction
- Diffused Junction
- Low Forward Voltage Drop, High Current Capability
- Surge Overload Rating to 50A Peak
- Designed for Surface Mount Application
- Plastic Material UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

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DF-S							
Dim	Min	Max					
Α	7.40	7.90					
В	6.20	6.50					
С	0.22	0.30					
D	0.076	0.33					
E	_	10.40					
G	1.02	1.53					
Н	8.13	8.51					
J	2.40	2.60					
K	5.00	5.20					
L	1.00	1.20					
All Dimensions in mm							

Mechanical Data

Case: Molded Plastic

 Terminals: Solder Plated Leads, Solderable per MIL-STD-202, Method 208

Polarity: As marked on CaseApprox. Weight: 0.38 grams

Mounting Position: AnyMarking: Type Number

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

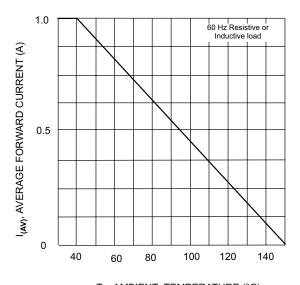
Single phase, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

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	V _{RMM} V _{RWM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	35	70	140	280	420	560	700	V
Average Forward Rectified Current @ T _A = 40°C	lo	1.0							Α
Non-Repetitive Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method)		50						Α	
Forward Voltage (per element) @ I _F = 1.0A	V _{FM}	1.1						V	
Peak Reverse Current at Rated @ T _A = 25°C DC Blocking Voltage (per element) @ T _A = 125°C		10 500					μA		
I ² t Rating for Fusing (t<8.3ms)		10.4						A ² s	
Typical Junction Capacitance (per element) (Note 1)		25						pF	
Typical Thermal Resistance, Junction to Ambient (Note 2)		40						°C/W	
Operating and Storage Temperature Range		-65 to +150					°C		

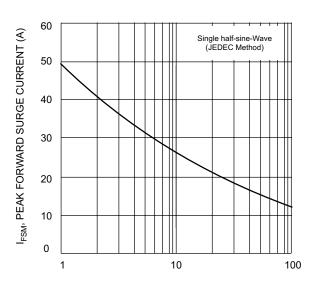
Notes: 1. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V DC.

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

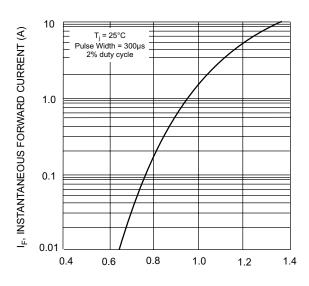
DS17001 Rev. H-2 1 of 2 DF005S-DF10S



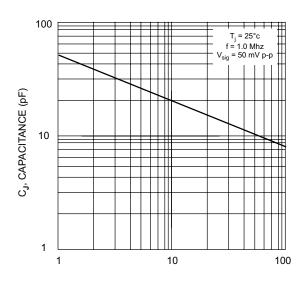
T_A, AMBIENT TEMPERATURE (°C) Fig. 1 Output Current Derating Curve



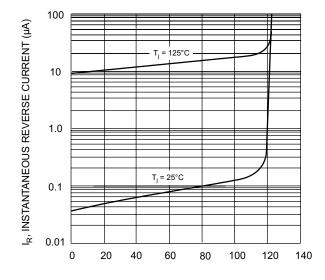
NUMBER OF CYCLES AT 60 Hz Fig. 3 Max Non-Repetitive Peak Forward Surge Current



 V_{F} , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typ Forward Characteristics (per element)



 $\label{eq:VR} {\rm V_{R},\,REVERSE\,\,VOLTAGE\,\,(V)}$ Fig. 4 Typ Junction Capacitance (per element)



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