SEMICONDUCTOR

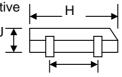
1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Data Sheet 1386, Rev.A

Green Products

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
- UL Recognized File # E223064
- Green Products in Compliance with the RoHS Directive



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

*Low profile models (J = 2.20~2.50mm) are available.

DF-S									
Dim	Min	Max	Min	Max					
Α	7.40	7.90	0.291	0.311					
В	6.20	6.50	0.244	0.256					
С	0.009	0.25	0.0004	0.001					
D	0.076	0.33	0.003	0.013					
Е	_	10.40	_	0.409					
G	1.02	1.53	0.040	0.060					
Н	8.13	8.51	0.320	0.321					
J*	3.20	3.40	0.126	0.134					
K	5.0	5.20	0.197	0.205					
L	1.0	1.20	0.039	0.047					
	ln ı	mm	In inch						

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

Please consult factory.

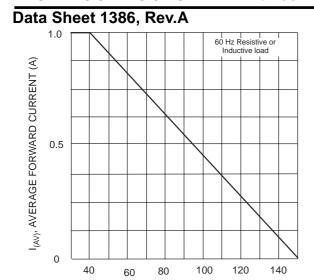
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	DF 005S-G	DF 01S-G	DF 02S-G	DF 04S-G	DF 06S-G	DF 08S-G	DF 10S-G	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°C	lo	1.0						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	Ігѕм	30						А	
Forward Voltage per element @I _F = 1.0A	VFM	1.1							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	lгм	10 500							μΑ
Typical Junction Capacitance per element (Note 1)	Cj	25							pF
Typical Thermal Resistance (Note 2)	R_{θ} JA	110							K/W
Operating and Storage Temperature Range	Тј, Тѕтс	-65 to +150						·	°C

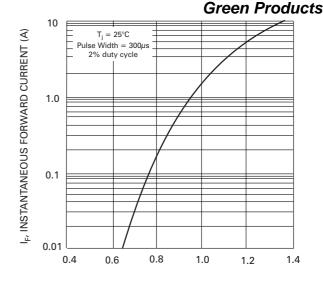
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

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

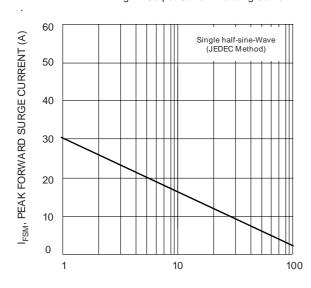
1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



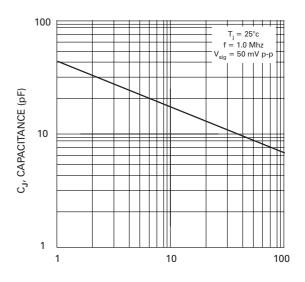
T_A, AMBIENT TEMPERATURE (°C) Fig. 1 Output Current Derating Curve



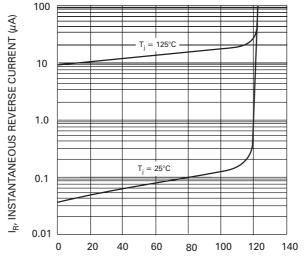
V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typ Forward Characteristics (per element)



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



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)

DF005S-G - DF10S-G

1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Data Sheet 1386, Rev.A

Green Products

DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior not ice to improve product characteristics. Before ordering, purchasers are advised to contact the Sensitron Semiconductor sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall Sensitron Semiconductor be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). Sensitron Semiconductor assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
 4- In no event shall Sensitron Semiconductor be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or Sensitron Semiconductor.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed writ ten permission of Sensitron Semiconductor.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations.