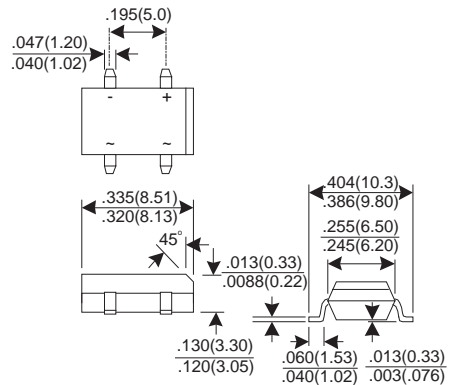


# 1.0 Amp Surface Mount Glass Single Phase Silicon Bridge

## Description

## Mechanical Dimensions

DF005GS~10GS



**DFS**

Dimensions in inches and (millimeters)

### Features

- ★ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ★ High surge current capability
- ★ Ideal for printed circuit boards
- ★ Glass passivated structure

### Mechanical Data

- ★ Case: Molded plastic body over passivated junctions
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: As marked on body
- ★ Mounting position: Any
- ★ Weight: 0.04 ounce, 1.0 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	DF005GS	DF01GS	DF02GS	DF04GS	DF06GS	DF08GS	DF10S	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	v
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current T <sub>A</sub> =40°C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage @ 1.0 A	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @ T <sub>J</sub> =25°C At Rated DC Blocking Voltage @ T <sub>J</sub> =125°C	I <sub>R</sub>	5.0 250							uA uA
Rating for fusing (t < 8.3ms)	I <sup>2</sup> t	10							A <sup>2</sup> S
Typical junction Capacitance (Note 1)	C <sub>J</sub>	25							pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>	40							°C/W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to + 150							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.  
(2) Thermal Resistance from junction to ambient mounted on P.C.B with 0.5 x 0.5" (13x13mm) copper pads.

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FIG.1 - FORWARD CURRENT DERATING CURVE

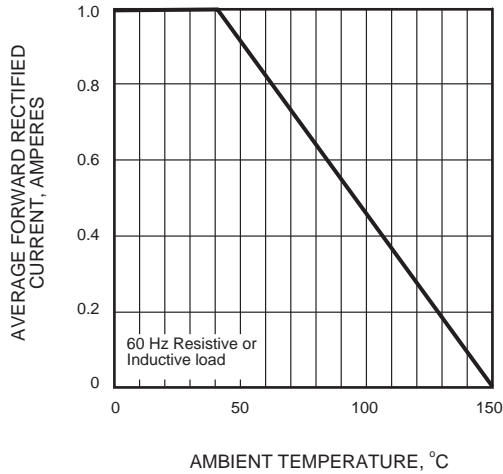


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

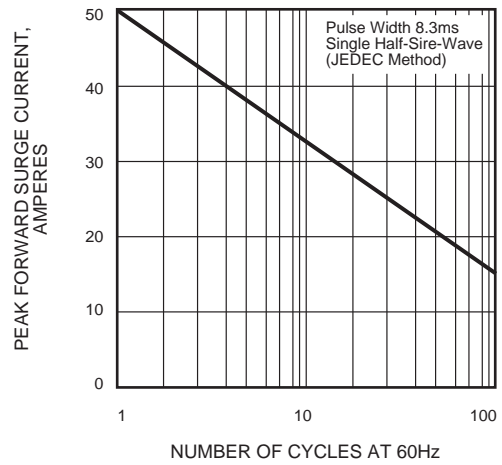


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

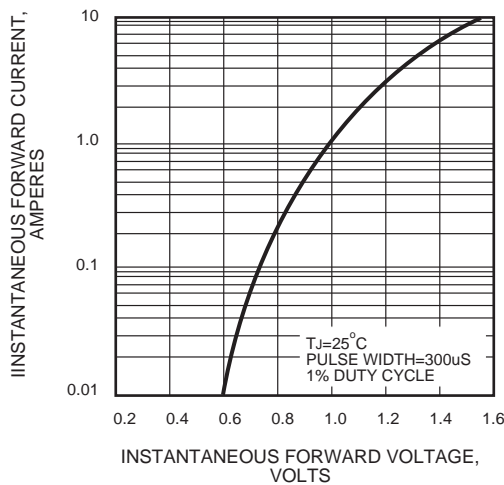


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

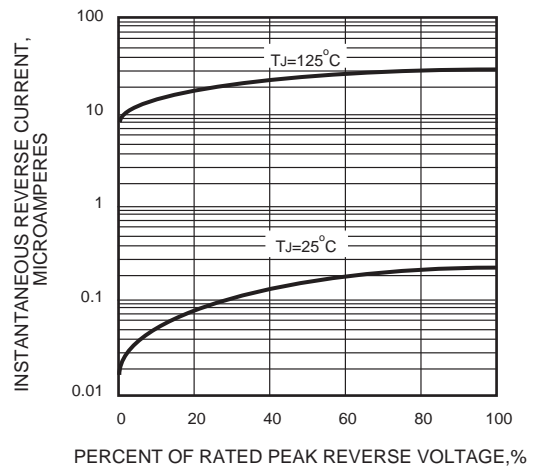


FIG.5 - TYPICAL JUNCTION CAPACITANCE

