

# DF20005S thru DF2010S

Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier  
 Reverse Voltage 50 and 1000V Forward Current 2.0A

## Features

- Ideal for printed circuit boards
- Applicable for automotive insertion
- High surge current capability
- Solder Dip 260°C, 40 seconds

## Mechanical Data

- Case: DFS
- Epoxy meets UL-94V-0 Flammability rating
- Terminals: Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- Polarity: As marked on body

## Applications

General purpose use in AC-to-DC bridge full wave rectifications for SMPS, lighting ballasters, adapters, battery chargers, home appliances, office equipment and telecommunication applications.

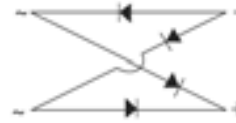
## Maximum Ratings & Electrical Characteristics

Rating at  $T_A=25^\circ\text{C}$  unless otherwise specified

Parameter	Symbol	DF20005S	DF2001S	DF2002S	DF2004S	DF2006S	DF2008S	DF2010S	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at $T_A=40$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	60							A
Rating for Fusig ( $t < 8.3\text{ms}$ )	$I^2t$	10							$\text{A}^2\text{sec}$
Maximum Instantaneous Forward Voltage Drop per Leg at 2A	$V_F$	1.20							V
Maximum DC Reverse Current at $T_A=25^\circ\text{C}$ Rated DC Blocking Voltage per Leg $T_A=125^\circ\text{C}$	$I_R$	5 500							$\mu\text{A}$
Typical Junction Capacitance per Element at 4.0V, 1MHz	$C_j$	25							pF
Operating Junction Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150							$^\circ\text{C}$

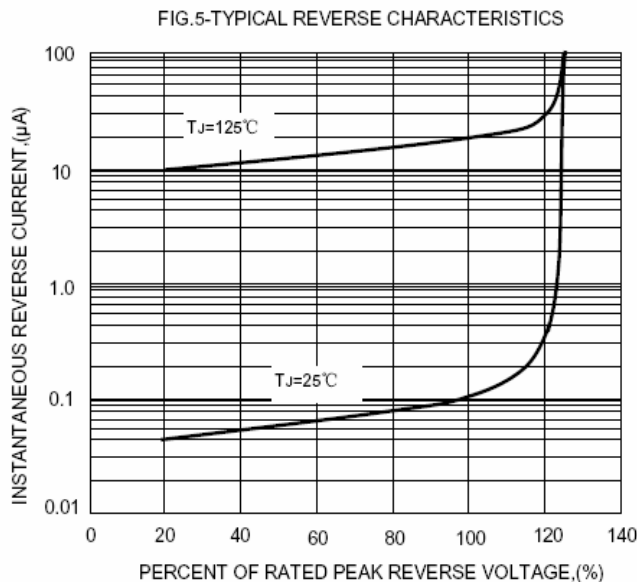
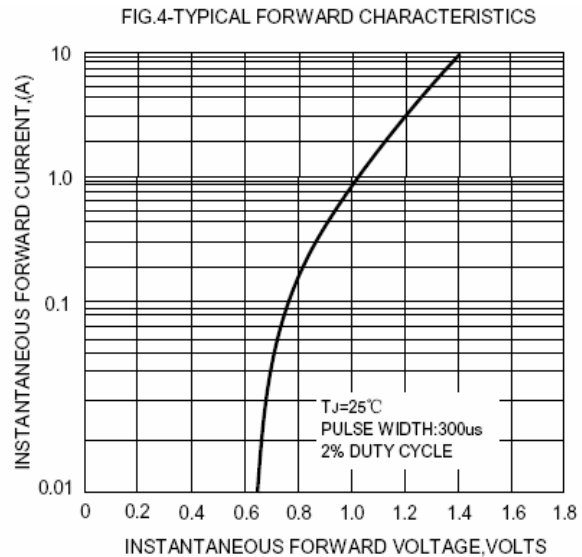
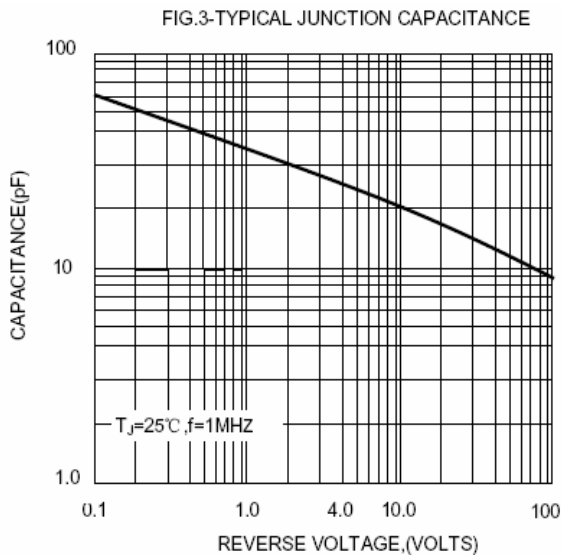
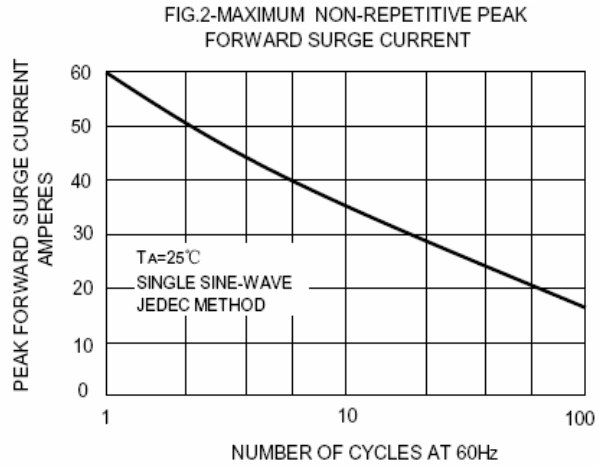
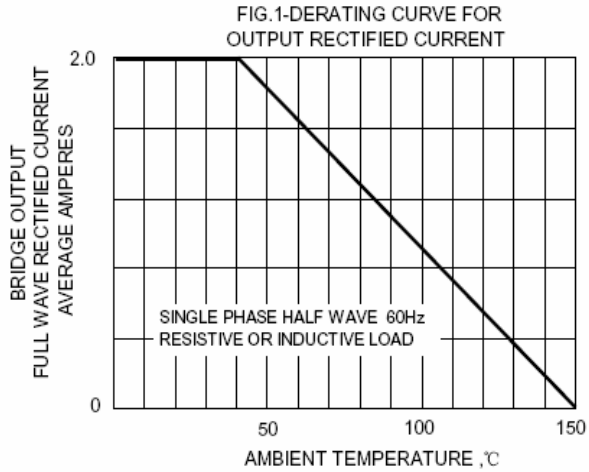


Package: DFS



Schematic Diagram

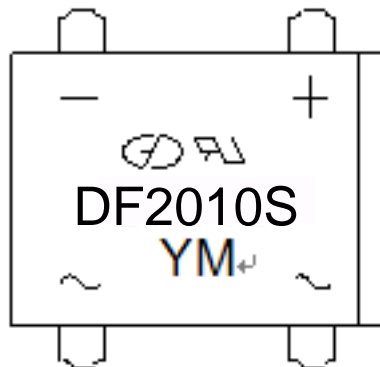
## Ratings and Characteristics Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)



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## Marking



### DATE CODE

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Code	9	A	B	C	D	E	F	G	H	J	K	0
Month	1	2	3	4	5	6	7	8	9	10	11	12
Code	1	2	3	4	5	6	7	8	9	O	N	D

## Package Outline Dimensions

