DF20005S thru DF2010S

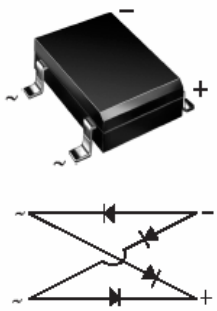
Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifier

Reverse Voltage 50 and 1000V Forward Current 2.0A

Features

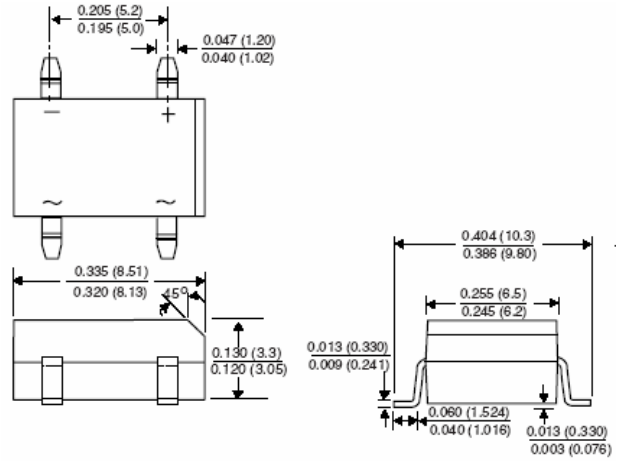
- ◆ Ideal for automated placement
- ◆ Applicable for automative insertion
- ◆ High surge current capability
- ◆ Solder Dip 260℃，40seconds

Case Style DFS



Mechanical Data

- ◆ Case: Low Profile DFS
  Epoxy meets UL-94V-0 Flammability rating
- ◆ Terminals:Matte tin plated ldads, solderable per
  J-STD-002B and JESD22-B102D
- ◆ Polarity:As markde on body



Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for SMPS, Lighting Ballaster, Adapter, Battery Chargwe, Home Appliances, Office Equipment, and Telecommunication applicationsy.

Maximum Ratings & Electrical Characteristics Ratings at 25℃

ambient temperature 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 TA=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<8.3ms)	I^2t	10							A^2sec
Maximum instantaneous forward voltage drop per leg at 2A	VF	1.20							V
Maximum DC reverse current at rated DC blocking voltage per leg TA=25℃ / TA=125℃	IR	5 / 500							μA
Typical junction capacitance per eiement at 4.0V,1MHz	Cj	25							pF
Operating junction temperature range	T_J	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃

Notes:

Ratings and Characteristics Curves (TA = 25℃ unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

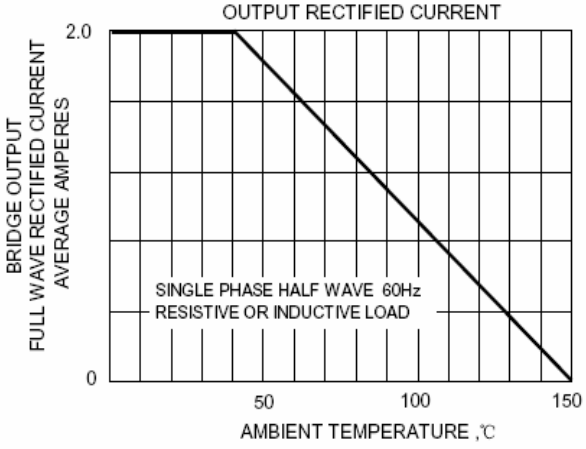


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

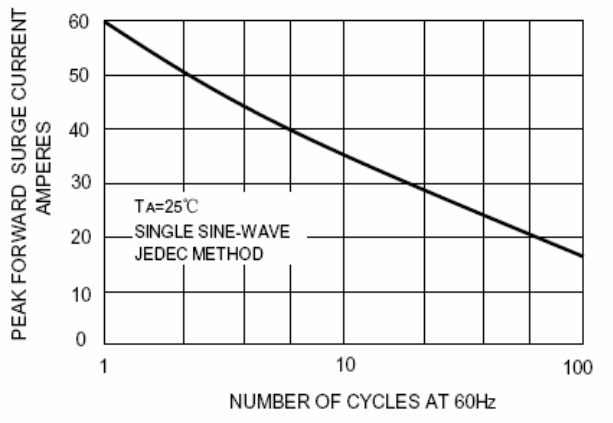


FIG.3-TYPICAL JUNCTION CAPACITANCE

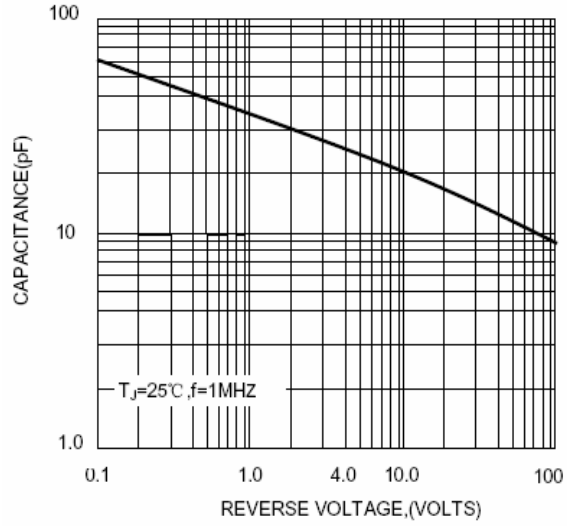


FIG.4-TYPICAL FORWARD CHARACTERISTICS

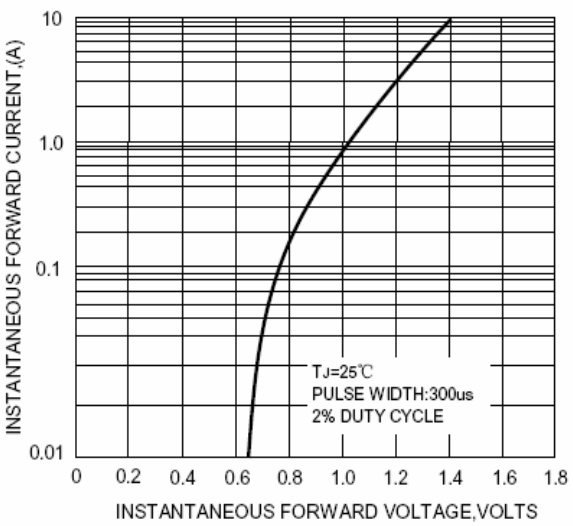


FIG.5-TYPICAL REVERSE CHARACTERISTICS