GOOD-ARK

DF005 thru DF10

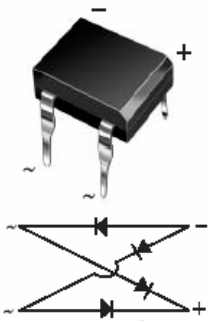
Miniature Glass Passivated Single-Phase Bridge Rectifier

Reverse Voltage 50 and 1000V Forward Current 1.0A

Features

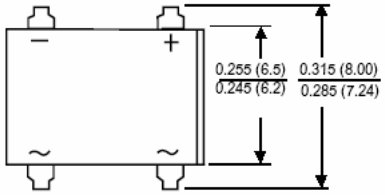
- ◆ Ideal for printed circuit boards
- ◆ Applicable for automative insertion
- ◆ High surge current capability
- ◆ Solder Dip 260℃，40seconds

Case Style DFM



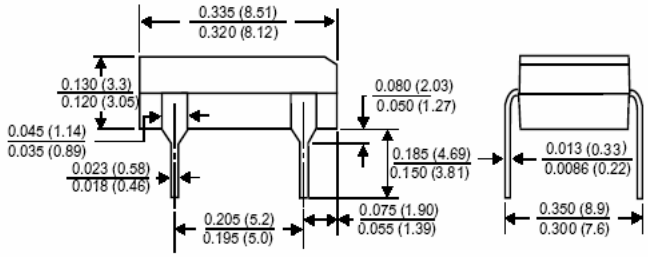
Mechanical Data

- ◆ Case:DF
  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



Typical Applications

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



Maximum Ratings & Electrical Characteristics Ratings at 25℃

ambient temperature unless otherwise specified.

Parameter	Symbol	DF005	DF01	DF02	DF04	DF06	DF08	DF10	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℃	$I_{F(AV)}$	1.0							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Rating for fusig (t<8.3ms)	I^2t	3.7							A^2sec
Maximum instantaneous forward voltage drop per leg at 0.5A	VF	1.10							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
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$ / $R_{\theta JL}$ / $R_{\theta JC}$	40 / 15 / 18							℃/W
Operating junction and Storage temperature range	TJ,TSTG	-55 to +150							℃

Notes: 1. Device mounted P.C.B with 0.47x0.47"(12mmx12mm) Copper Pads.

2. JEDEC registered values

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

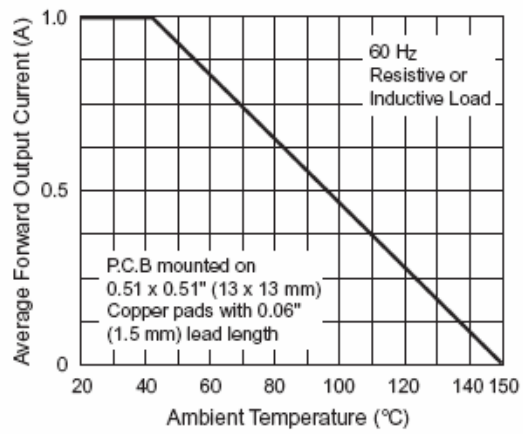


Figure 1. Derating Curve Output Rectified Current

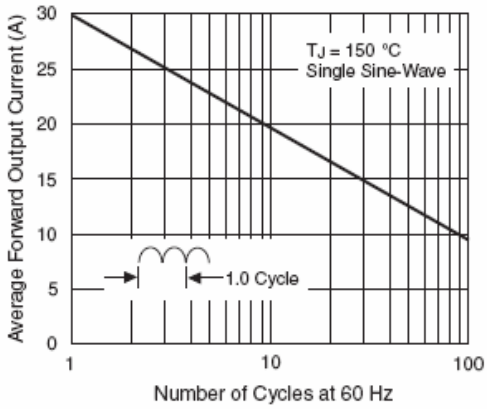


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Leg

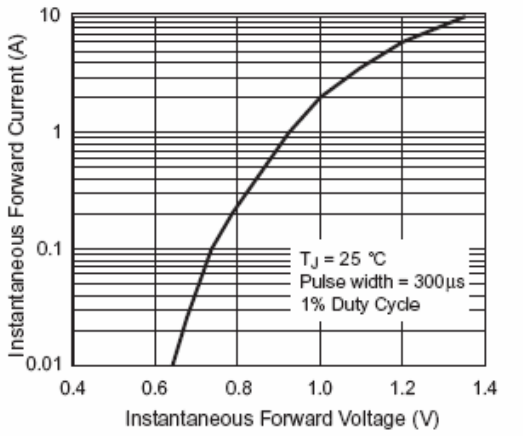


Figure 3. Typical Forward Characteristics Per Leg

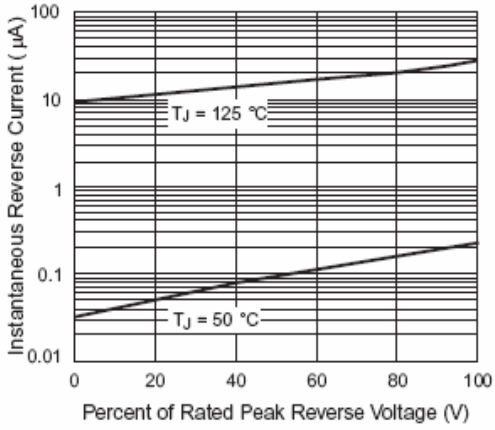


Figure 4. Typical Reverse Leakage Characteristics Per Leg

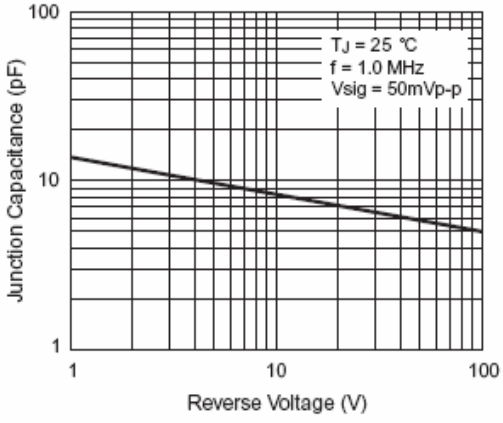


Figure 5. Typical Junction Capacitance Per Leg

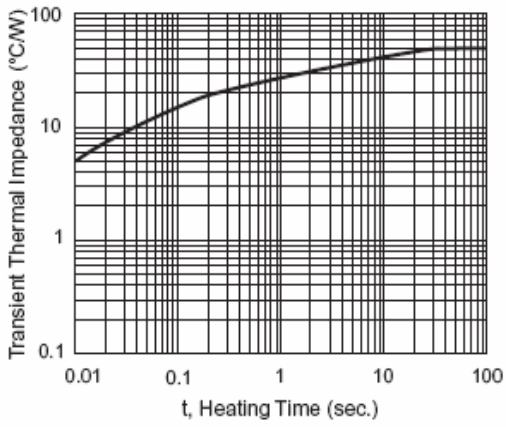
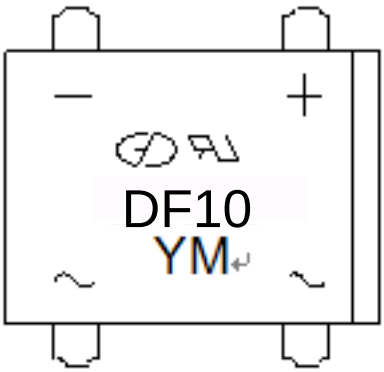


Figure 6. Typical Transient Thermal Impedance Per Leg

Marking



DATE CODE

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Month	1	2	3	4	5	6	7	8	9	10	11	12
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