



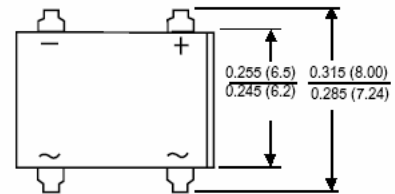
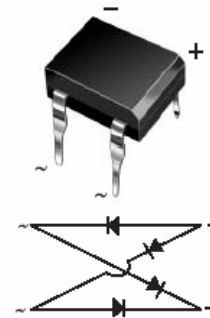
Features

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

Mechanical Data

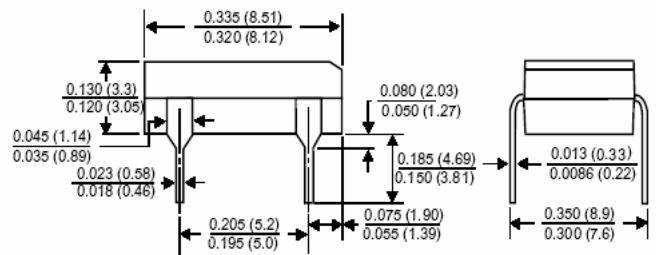
- ◆ Case:DF
Epoxy meets UL-94V-0 Flammability rating
- ◆ Terminals:Matte tin plated (E3 Suffix) leads, solderable per J-STD-002B and JESD22-B102D
- ◆ Polarity:As marked on body

Case Style DFM



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°C

ambient temperature unless otherwise specified.

Parameter	Symbol	DB101	DB102	DB103	DB104	DB105	DB106	DB107	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°C	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 ² t	3.7							A ² sec
Maximum instantaneous forward voltage drop per leg at 1.0A	V _F	1.10							V
Maximum DC reverse current at TA=25°C	I _R	5							μA
rated DC blocking voltage per leg TA=125°C		500							
Typical junction capacitance per eiement at 4.0V,1MHz	C _j	25							pF
Typical thermal resistance per leg (Note 1)	R _{θJA}	40							°C/W
	R _{θJL}	15							
Operating junction temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

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

2. JEDEC registered values

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

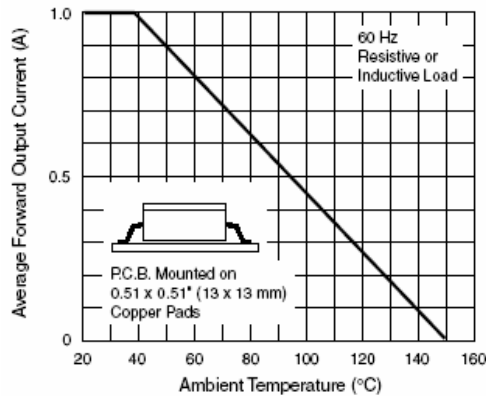


Figure 1. Derating Curve Output Rectified Current

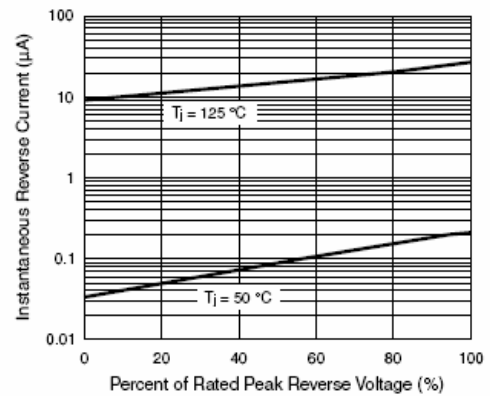


Figure 4. Typical Reverse Leakage Characteristics Per Diode

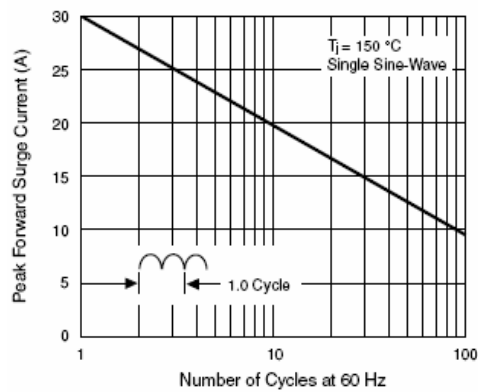


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current Per Diode

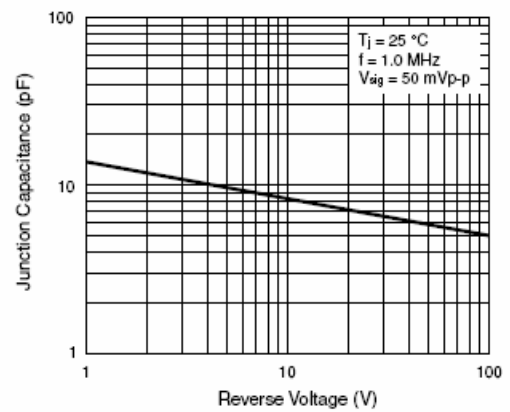


Figure 5. Typical Junction Capacitance Per Diode

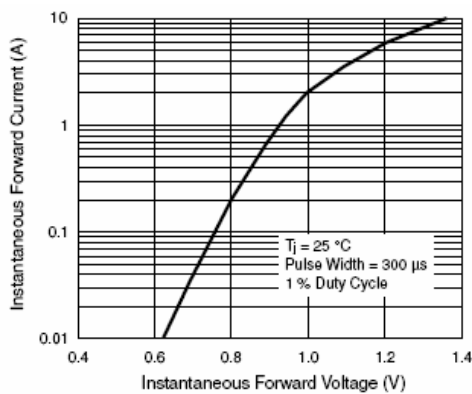


Figure 3. Typical Forward Characteristics Per Diode

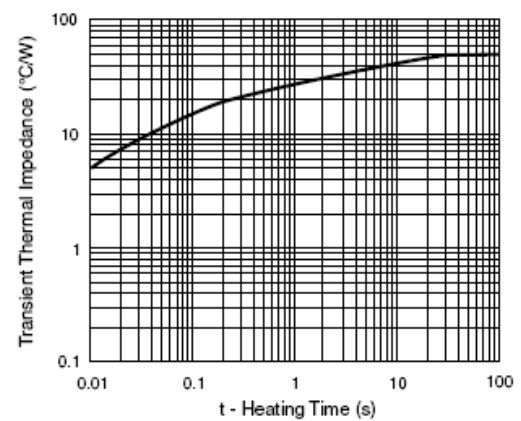
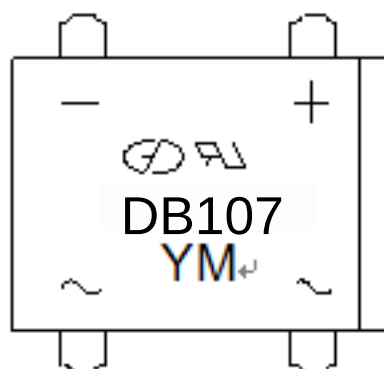


Figure 6. Typical Transient Thermal Impedance

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