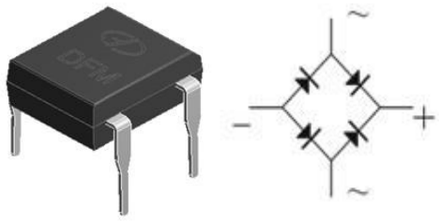
Reverse Voltage 200~1000V Forward Current 1.0A

Features

- Glass passivated Bridge Rectifiers
- Ideal for automated placement
- High surge current capability
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



DFM

Typical Applications

- General purpose use in ac-to dc bridge full wave rectification for SMPS, lighting, adapter, charger, home appliances, office equipment, and telecommunication applications

Mechanical Data

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

Maximum Ratings (TA = 25 °C unless otherwise noted)

Parameter		Symbol	DB103	DB104	DB105	DB106	DB107	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage		V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage		V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current		$I_{F(AV)}$	1.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	40					A
Rating for fusing (t≤8.3ms)		I^2t	6.7					A^2s
Operating junction and storage temperature range		T_J, T_{STG}	- 55 to + 150					°C
Typical junction capacitance	4.0 V, 1 MHz	C_J	10.5					pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	**Test Conditions**	**Symbol**	**DB103**	**DB104**	**DB105**	**DB106**	**DB107**	**Unit**
Maximum instantaneous forward voltage	0.5A	V_F	1.0					Volts
	1.0A		1.1					
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I_R	5					μA
	TA=125°C		50					
Typical thermal resistance[1)]	juntion to ambient	$R_{\theta JA}$	42					°C/W
	juntion to case	$R_{\theta JC}$	12					

Note: 1)The thermal resistance from junction to ambient,case or mount,mounted on P.C.B with 13×13mm copper pads,2 OZ,FR4 PCB

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

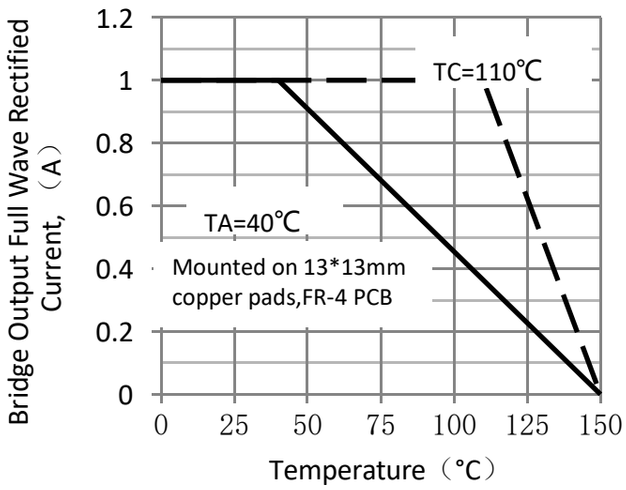


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

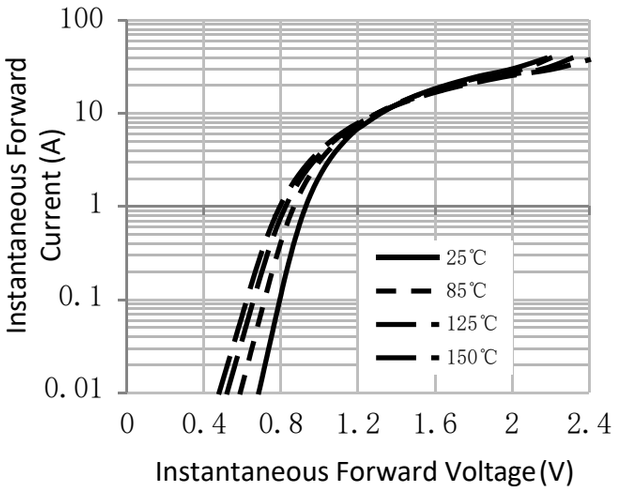


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

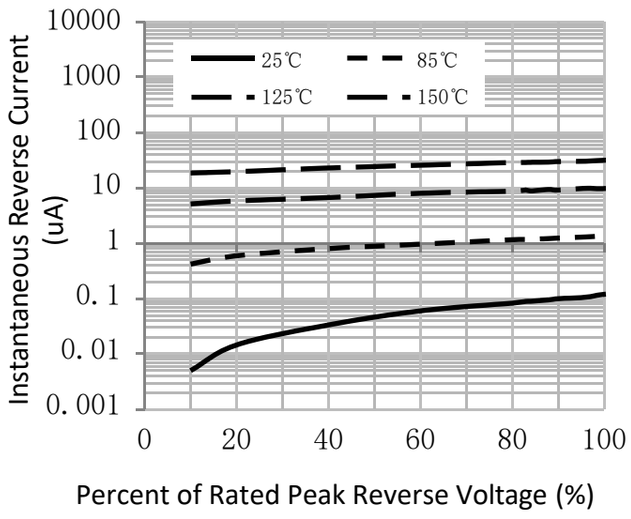
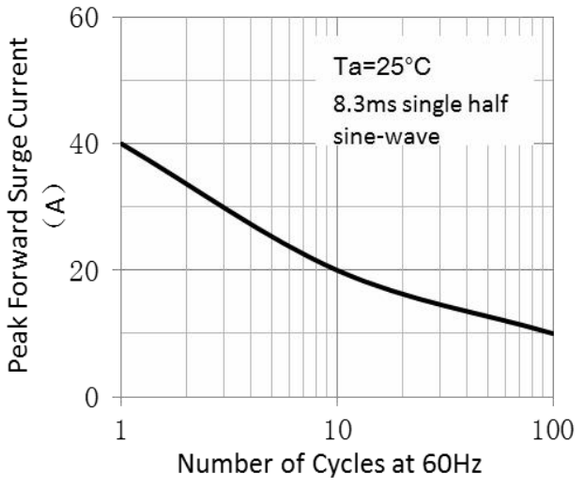


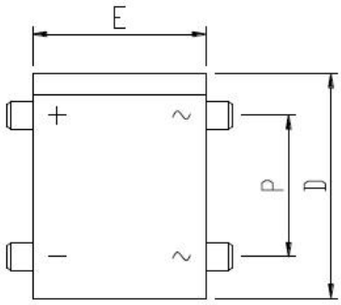
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



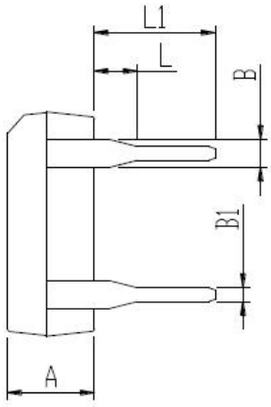
Package Outline Dimensions

in inches (millimeters)

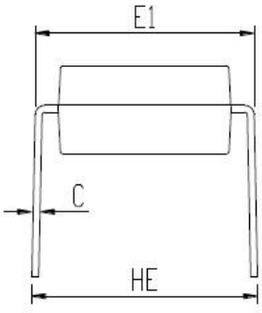
First angle projection



top view



right elevation



elevation view

	unit:mm		unit:inch	
Dim	Min	Max	Min	Max
A	3.05	3.30	0.120	0.130
B	1.02	1.20	0.040	0.047
B1	0.46	0.58	0.018	0.023
C	0.22	0.33	0.009	0.013
D	8.00	8.51	0.315	0.335
E	6.20	6.50	0.244	0.256
E1	7.24	8.00	0.285	0.315
HE	7.60	8.90	0.299	0.350
L	1.27	2.03	0.050	0.080
L1	3.81	4.69	0.150	0.185
P	5.00	5.20	0.197	0.205

Revision History

Document Version	Date of release	Discroption of changes
Rev.A	2021/3/21	Released Datasheet
Rev.B	2023/12/21	Modify document format

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