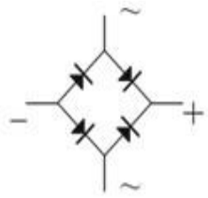
Reverse Voltage 200~1000V Forward Current 2.0A

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	DB203	DB204	DB205	DB206	DB207	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		$I_{F(AV)}$	2.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		I_{FSM}	60					A
Rating for fusing (t≤8.3ms)		I^2t	15.0					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	16					pF

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	**Test Conditions**	**Symbol**	**DB203**	**DB204**	**DB205**	**DB206**	**DB207**	**Unit**
Maximum instantaneous forward voltage	IF=1A	V_F	1.0					Volts
	IF=2A		1.1					
Maximum DC reversecurrent at rated DC blocking voltage	TA=25°C	I_R	5					μA
	TA=125°C		50					
Typical thermal resistance[1)]	juntion to ambient	$R_{\theta JA}$	49					°C/W
	juntion to case	$R_{\theta JC}$	21					

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

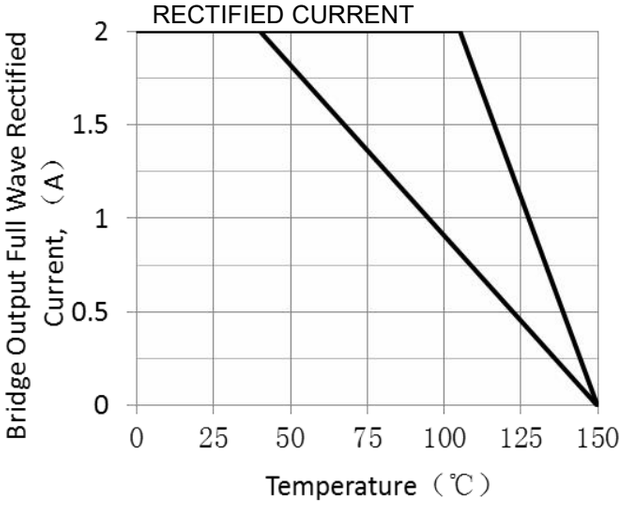


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISITCS

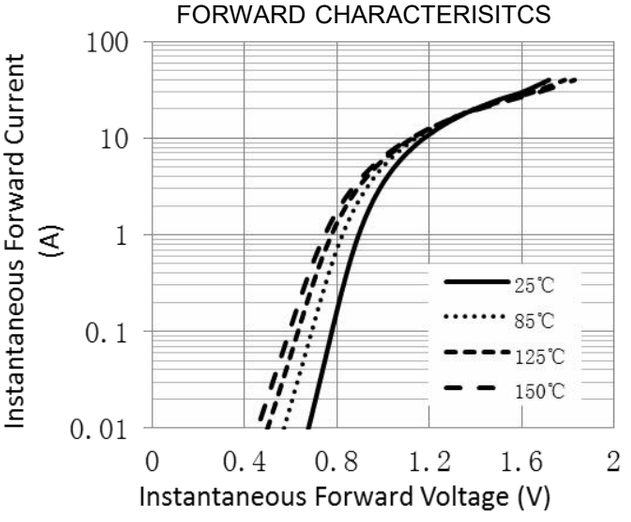


FIG.3-TYPICAL REAK REVERSE VOLTAGE CHARACTERISTICS

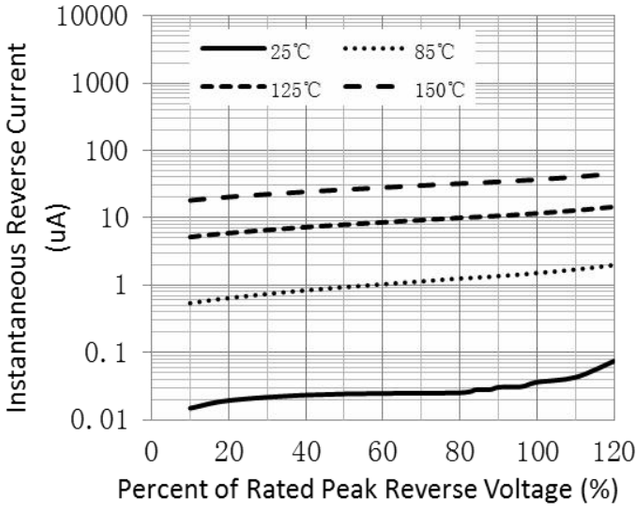
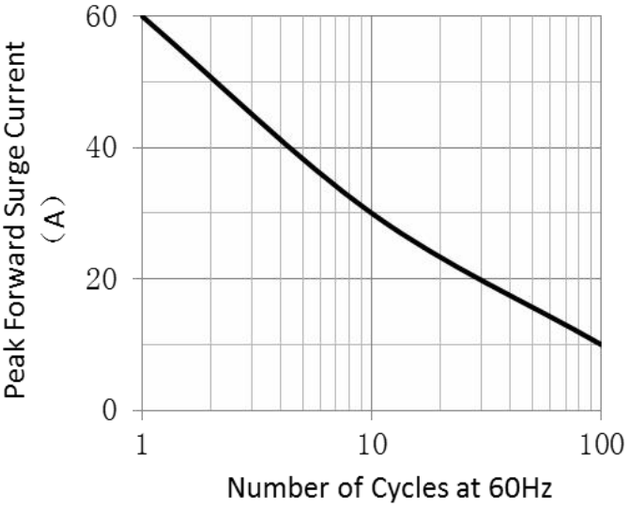


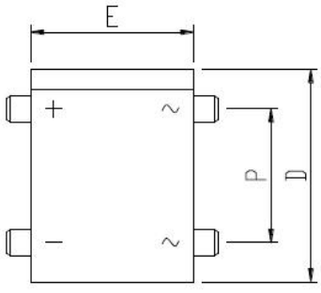
FIG.4-MAXIMUM NON-REPETITEVE PEAK FORWARD SUGER CURRENT



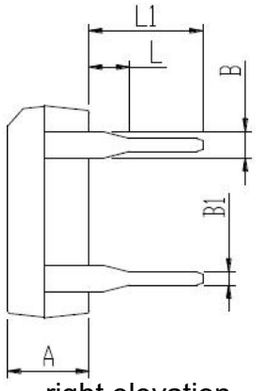
Package Outline Dimensions

in inches (millimeters)

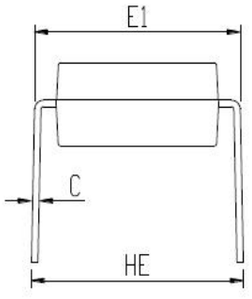
First angle projection



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

Disclaimers

These materials are intended as a reference to assist our customers in the selection of the Suzhou Good-Ark product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Suzhou Good- Ark Electronics Co., Ltd.or a third party.

Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.

All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Suzhou Good-Ark Electronics Co., Ltd. without notice due to product improvements or other reasons. It is therefore recommended that customers contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized Suzhou Good-Ark Electronics Co., Ltd. for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Suzhou Good-Ark Electronics Co., Ltd. by various means, including our website home page.
(http://www.goodark.com)

When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, Please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Suzhou Good-Ark Electronics Co., Ltd. assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.

The prior written approval of Suzhou Good-Ark Electronics Co., Ltd. is necessary to reprint or reproduce in whole or in part these materials.

Please contact Suzhou Good-Ark Electronics Co., Ltd. or an authorized distributor for further details on these materials or the products contained herein.