

Reverse Voltage 200~1000V Output Current 2.0A

Features

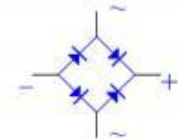
- Glass passivated Bridge Rectifiers
- Ideal for automated placement
- Very low profile-typical height 1.4 mm
- Moisture sensitivity: level 1, per J-STD-020
- High temperature soldering guaranteed: 260°C/10 seconds



RoHS
COMPLIANT



E92



Mechanical Data

- Case: E92, Molding compound meets UL 94V-0 flammability rating
- Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102

Typical Applications

General purpose use in ac-to-dc bridge full wave rectification for TV, Monitor, SMPS, Adapter, Printer, Audio equipment, and Home Applications application

Maximum Ratings (TA = 25 °C unless otherwise noted)							
Parameter	Symbol	E92203A	E92204A	E92205A	E92206A	E92207A	Unit
Maximum repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	200	400	600	800	1000	V
Maximum average output rectified current	Io(AV)	2.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	75					A
Rating for fusing (t ≤ 8.3ms)	I ² t	23					A ² s
Operating junction and storage temperature range	TJ, TSTG	-55 to +150					°C

Electrical Characteristics (TA = 25 °C unless otherwise noted)

Parameter	Test Conditions	Symbol	E92203A	E92204A	E92205A	E92206A	E92207A	Unit
Maximum instantaneous forward voltage	IF=1.0A, Ta=25°C	V _F	1.0					Volts
	IF=1.0A, Ta=125°C		0.90					
	IF=2.0A, Ta=25°C		1.05					
	IF=2.0A, Ta=125°C		0.95					
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	I _R	5.0					μA
	TA=125°C		100					
Typical junction capacitance	4.0 V, 1 MHz	C _J	18					pF
Maximum reverse recovery time	I _F =0.5A, I _R =1.0A, I _r =0.25A	t _{rr}	2					us
Typical thermal resistance	junction to ambient ¹⁾	R _{θJA}	39					°C/W
	junction to case ¹⁾	R _{θJC}	16					

Note 1), The thermal resistance from junction to ambient and case, mounted on glass epoxy FR-4 P.C.B with 13*13mm copper pads

Ratings and Characteristics Curves

(TA = 25°C unless otherwise noted)

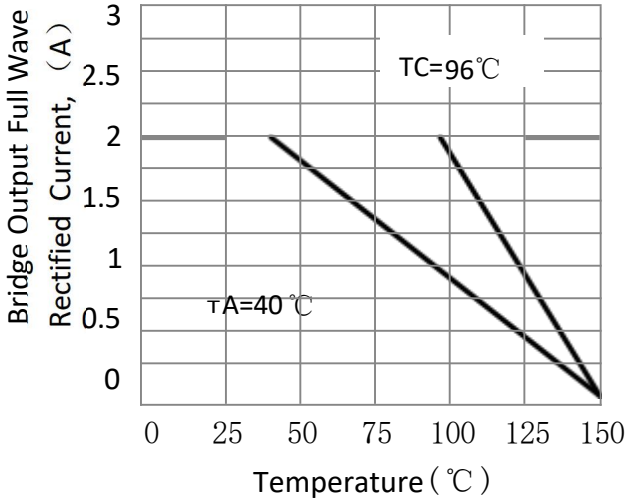


Figure 1. Forward Current Derating Curve

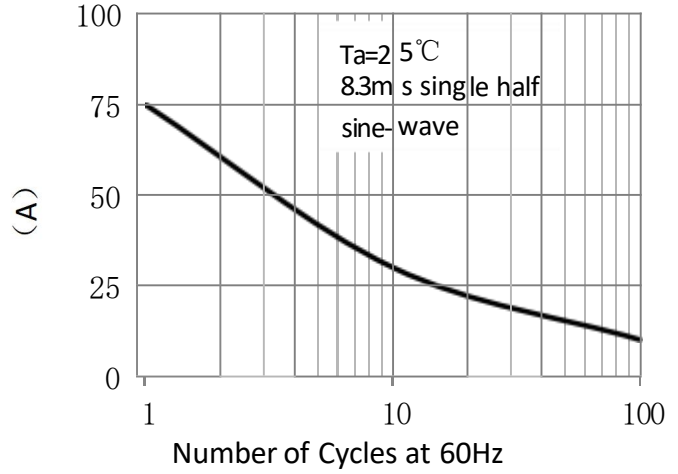


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

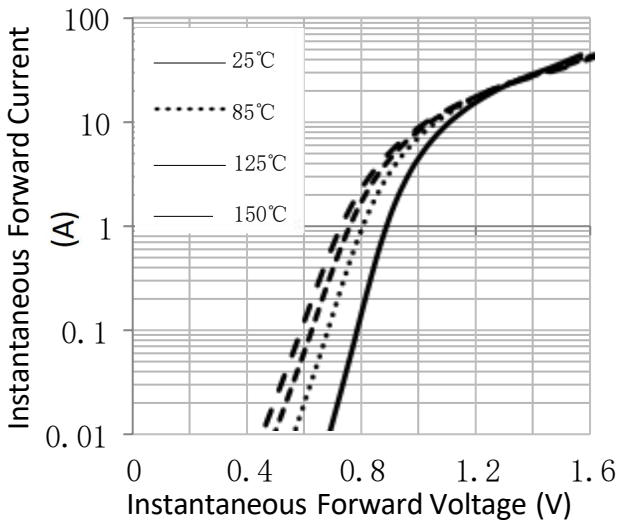


Figure 3. Typical Instantaneous Forward Characteristics

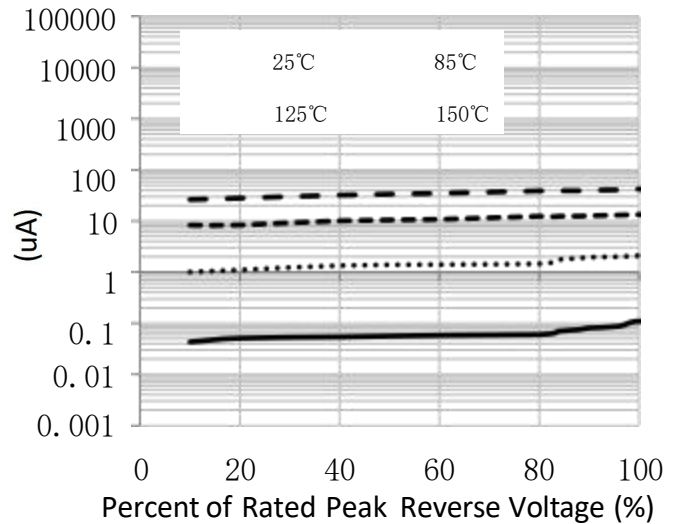


Figure 4. Typical Reverse Characteristics

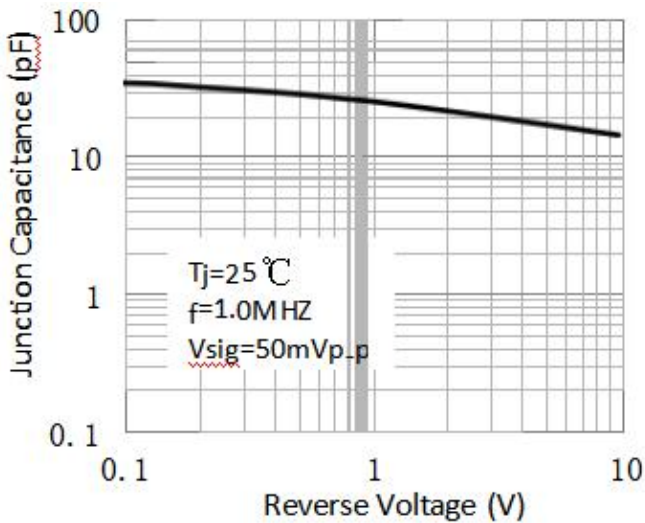
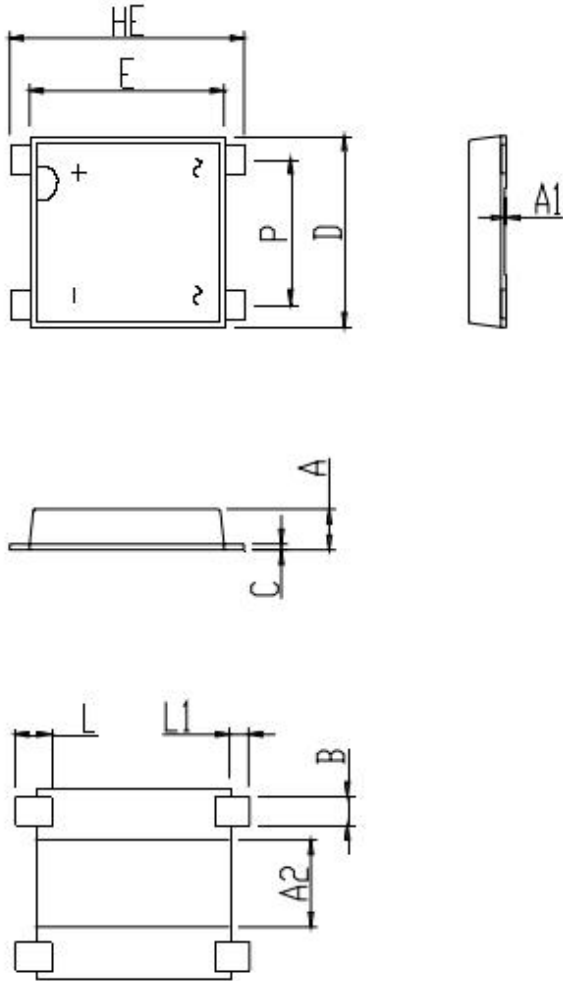


Figure 5. Typical Junction Capacitance

Package Outline Dimensions



unit:mm			
Dim	Min	Nom.	Max
HE	8.55	8.75	8.95
E	7.06	7.26	7.46
D	6.40	6.6	6.80
P	4.80	5.0	5.20
A	1.30	1.4	1.50
C	0.18	0.2	0.30
L	1.00	1.30	1.50
L1	0.60	0.75	1.00
B	0.85	1.0	1.15
A1	-	0.05	-
A2	-	3.0	-

Revision History

Document Version	Date of release	Discription of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/8	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.