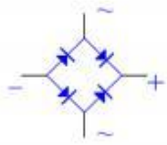
Reverse Voltage 200~1000V Output Current 2.0A

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℃/10 seconds

RoHS COMPLIANT

E92



Mechanical Data

- Case: E92, Molding compound meets UL 94V-0 flammability rating
- Terminals: Matte tin plated leads, solderable per MII-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^2t	23					A^2s
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℃	V_F	1.0					Volts
	IF=1.0A,Ta=125℃		0.90					
	IF=2.0A,Ta=25℃		1.05					
	IF=2.0A,Ta=125℃		0.95					
Maximum DC reverse current at rated DC blocking voltage	TA=25℃	I_R	5.0					μA
	TA=125℃		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_{rr}=0.25A	t_{rr}	2					us
Typical thermal resistance	juntion to ambient[1)]	$R_{\theta JA}$	39					℃/W
	juntion to case[1)]	$R_{\theta JC}$	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℃ unless otherwise noted)

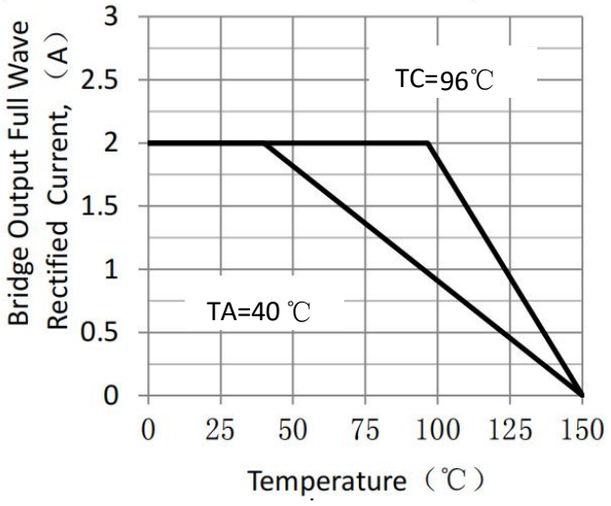


Figure 1.Forward Current Derating Curve

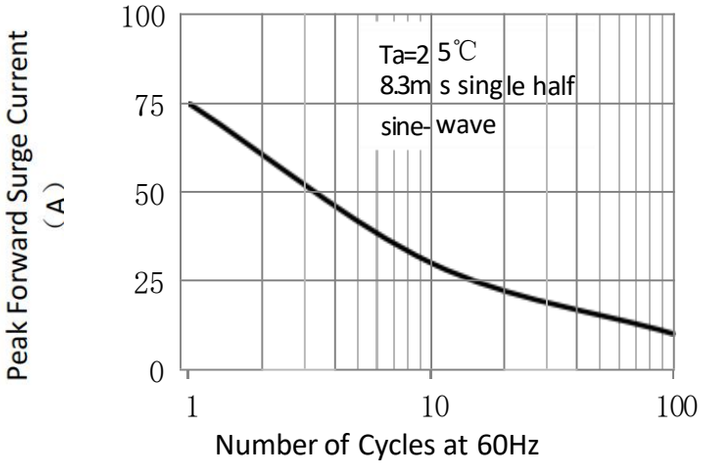


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

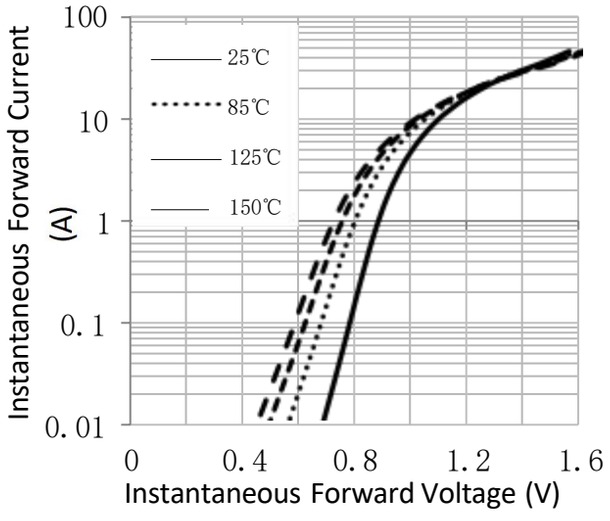


Figure 3. Typical Instantaneous Forward Characteristics

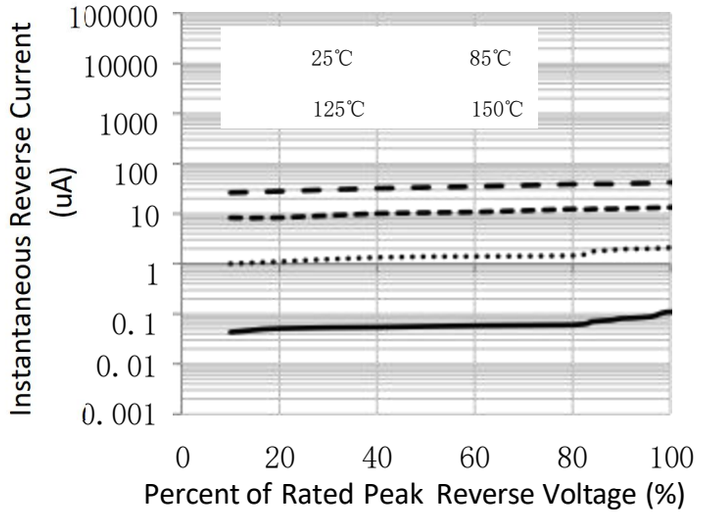


Figure 4. Typical Reverse Characteristics

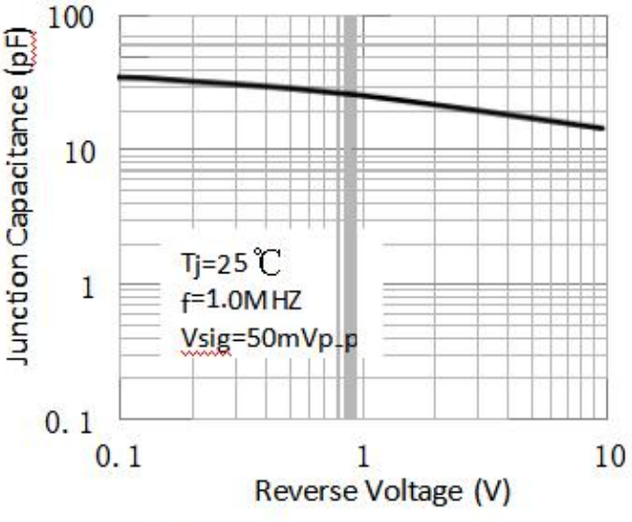
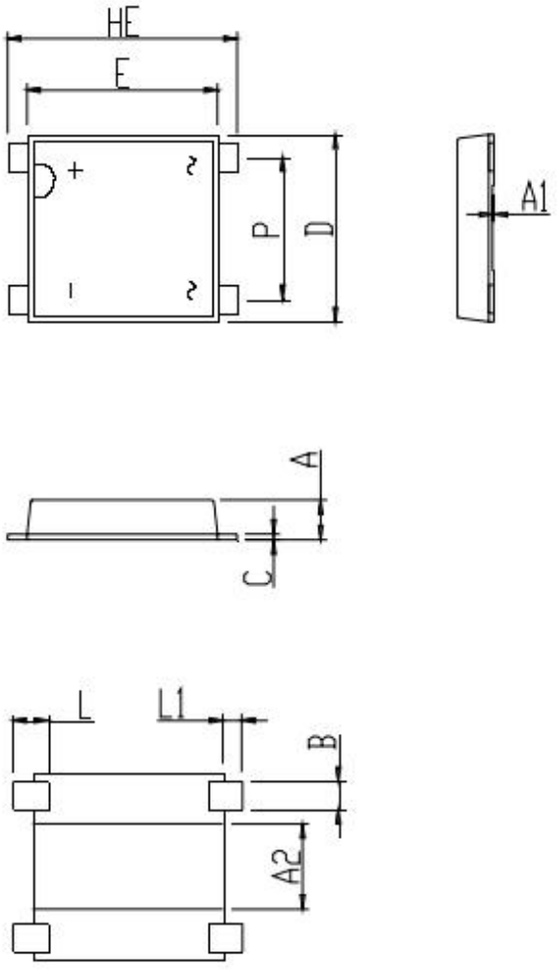


Figure 5. Typical Junction Capacitance

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	Discroption of changes
Rev.A	2021/3/1	Released Datasheet
Rev.B	2023/12/8	Modify document format

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