2.0A Fast Recovery Bridge Rectifier

1 General Description

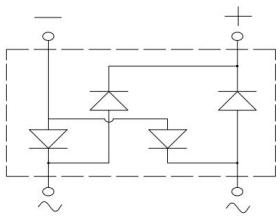
1.1 Features

- Ideal for automated placement
- Glass passivated chip junction
- High surge current capability
- Meets MSL level 1,per J-STD-020,LF maximum peak of 260℃

REVERSE VOLTAGE
1000V
FORWARD CURRENT
2Ampere

1.2 Typical Applications

- General purpose use in high frequency AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.



1.3 Mechanical Data

- Case:ABS,Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- Terminals: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- Polarity: Marked on body

2 Maximum Ratings(TA=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	RABS210	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average rectified output current @60Hz sine wave, R-load, Tc=108℃	I_O	2.0	A
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	50	A
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃		100	A
Current squared time @1ms≤t<8.3ms Tj=25℃, Rating of per diode	I^2t	10.4	A^2sec
Operating Temperature Range	T_J	-55 to +150	℃
Storage Temperature Range	T_{STG}	-55 to +150	℃

Note:1.Device mounted on P.C.B with 35mm*25mm*1.7mm

3 Electrical Characteristics(TA=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	RABS210	UNIT
Maximum instantaneous Forward Voltage drop per diode	V_F	I_{FM}=1.0A	1.3	V
Maximum reverse recovery time	t_{rr}	I_F=0.5A, I_R=1.0A, I_{rr}=0.25A	500	ns
Typical junction capacitance	Cj	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	15	pF
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	Tj =25℃	5	μA
		Tj =125℃	100	

4 Characteristics Curves(TA=25℃ Unless otherwise specified)

FIG1:Io-Tc Curve

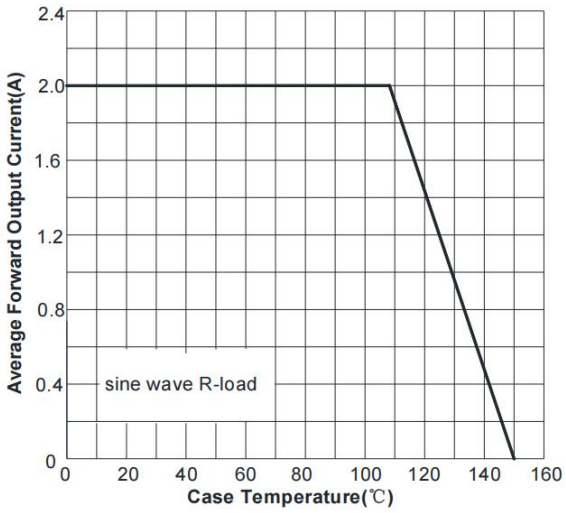


FIG2:Surge Forward Current Capability

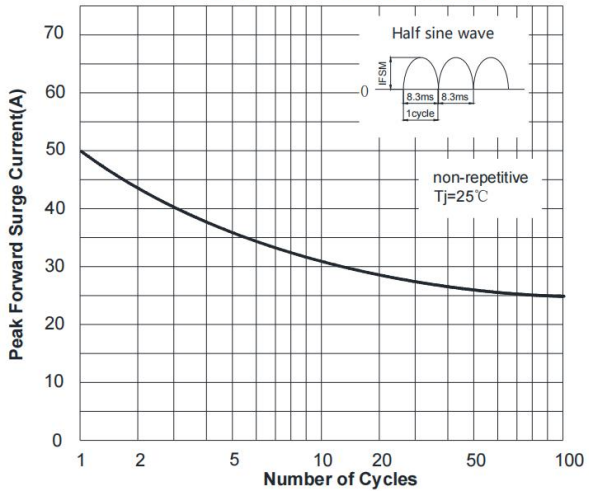


FIG3: Typical Forward Voltage

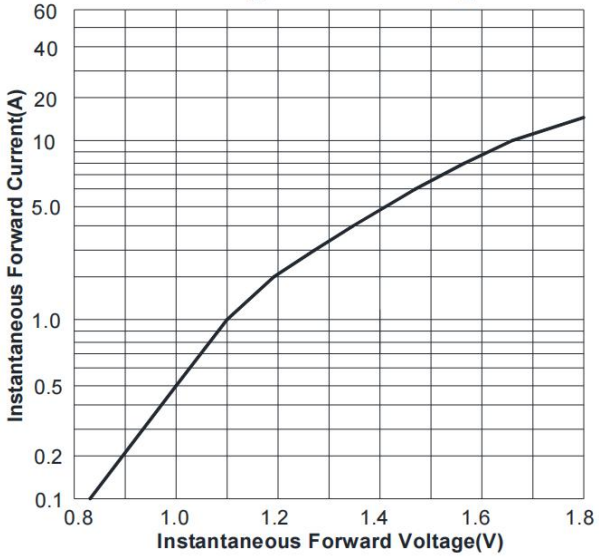
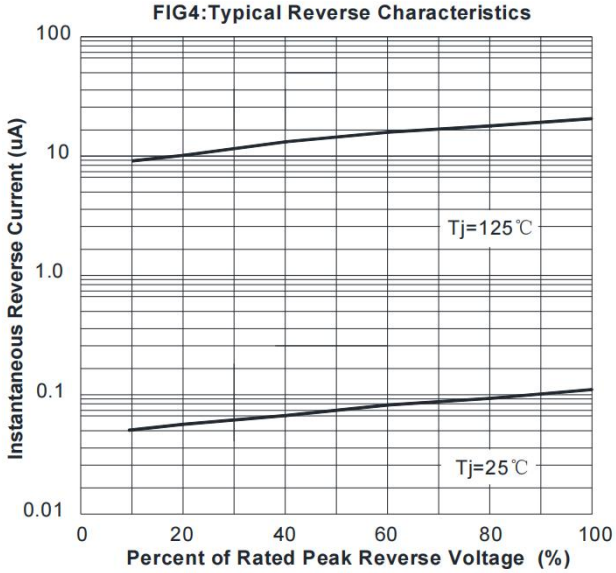
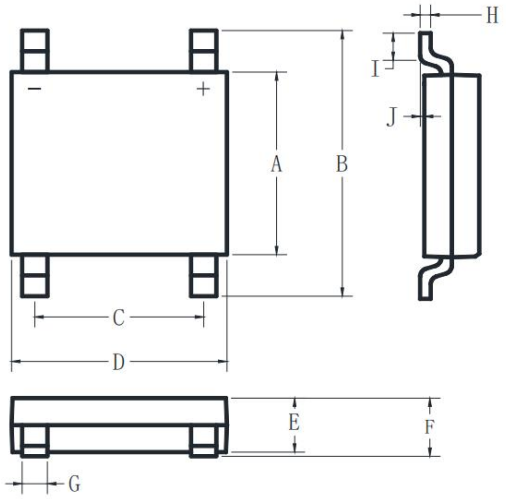


FIG4:Typical Reverse Characteristics



5 Package Outline Dimensions



Symbol	UNIT(mm)	
	Min	Max
A	4.30	4.50
B	6.00	6.40
C	3.90	4.10
D	4.90	5.10
E	1.25	1.45
F	1.60 Max	
G	0.60	0.70
H	0.15	0.25
I	0.30	0.80
J	0.02	0.15

6 Ordering Information

PACKAGE	UNIT WEIGHT (g)	REEL (pcs)	BOX (pcs)	CARTON (pcs)
ABS	Approximate 0.16	5000	10000	50000

Disclaimer

1. All information contained in this document is for reference only. Shandong Baocheng Electronics Co.,Ltd reserves the right to revise this document, product specifications and related data at any time without prior notice. Customers shall obtain and confirm the latest product documents and specifications before purchasing or using the products.

2. Under no circumstances shall the Company be liable for any failure or damage caused by the operation of semiconductor devices beyond the maximum rated values.

3. Shandong Baocheng Electronics Co.,Ltd does not warrant the suitability of its products for any specific application and assumes no responsibility for customer's complete machine design or application debugging. Without written approval, products are prohibited from being used as key components of life support equipment. The Company shall not be liable for any consequences arising from unauthorized use.

4. No intellectual property license of Shandong Baocheng Electronics Co.,Ltd is granted, explicitly or implicitly, through this document.