

## Single Phase 0.5AMP Surface Mount Glass Passivated Bridge Rectifiers

### Main Product Characteristics

$I_{F(AV)}$	0.5A
$V_{RRM}$	200~1000V
$T_J$	150°C
$V_{F(Typ)}$	1.0V

### Features

- Glass passivated die construction.
- Low forward voltage drop.
- High current capability.
- High surge current capability.
- Design for surface mount application.
- Suffix "G" indicates Halogen free parts, ex AB2SG
- Lead free in compliance with EU RoHS.

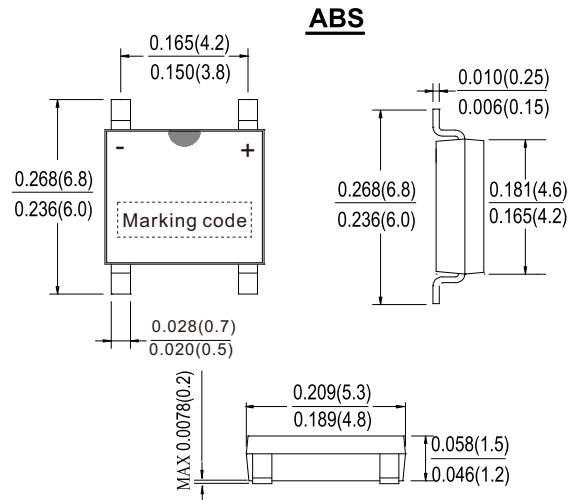
### Mechanical data

- Case : SOPA-4, Molded plastic, ABS
- Terminals : plated leads solderable per MIL-STD-202, Method 208
- Polarity : as marked on case
- Mounting position: Any
- Marking: type number

### Maximum ratings and electrical characteristics

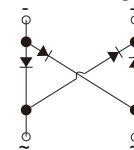
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

### Outline



Dimensions in inches and (millimeters)

### Circuit Diagram



Parameter	Conditions	Symbol	Value	UNIT
Average rectified output current	$T_c = 100^\circ\text{C}$ (Note:1)	$I_{F(AV)}$	0.5	A
Rating for fusing ( $t < 8.3\text{ms}$ )		$I^2t$	2.59	$\text{A}^2\text{s}$
Non-Repetitive Peak Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	$I_{FSM}$	25	A
Peak Reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$	$I_R$	5	uA
	$T_A = 125^\circ\text{C}$		200	
Typical Thermal resistance per leg		$R_{BJA}$	62.5	$^\circ\text{C/W}$
		$R_{BJL}$	25	
Operating and Storage temperature Range		$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

Symbol	Max. repetitive peak reverse voltage $V_{RRM}$ (V)	Max. Working peak reverse voltage $V_{RWM}$ (V)	Max. DC blocking voltage $V_{DC}$ (V)	Max. RMS voltage $V_{RMS}$ (V)	forward voltage per element @ $I_F=0.5\text{A}$ $V_{FM}$ (V)
AB2S	200	200	200	140	1.0
AB4S	400	400	400	280	
AB6S	600	600	600	420	
AB8S	800	800	800	560	
AB10S	1000	1000	1000	700	

Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.

■ Rating and characteristic curves

Fig. 1 Maximum Forward Current Derating Curve

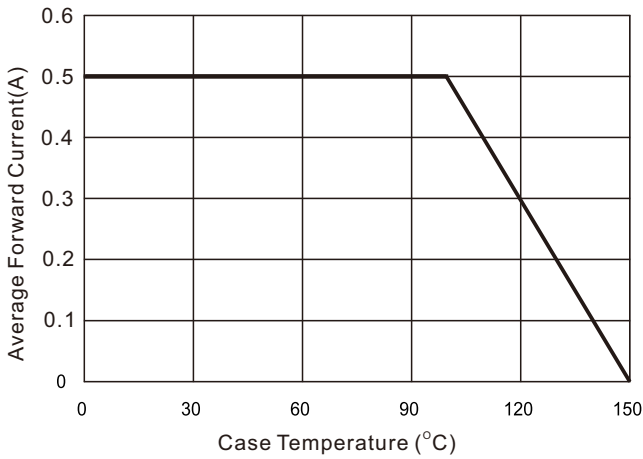


Fig. 2 Typical Forward Characteristics

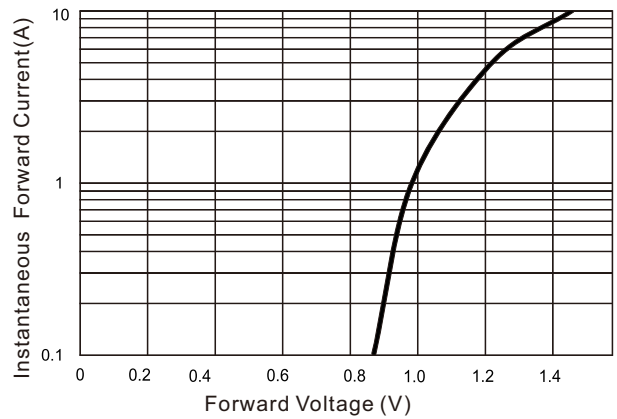


Fig. 3 Maximum Non-Repetitive Forward Surge Current

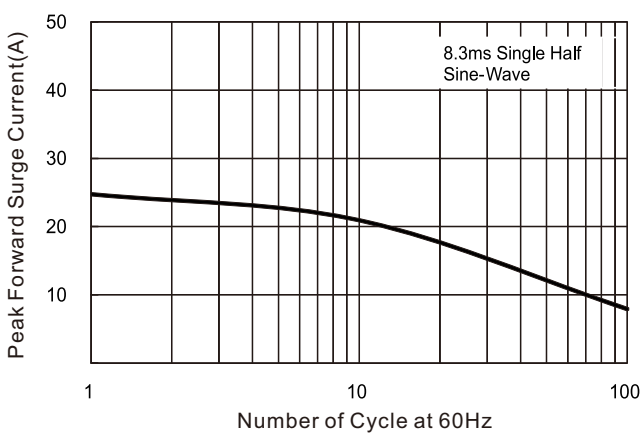
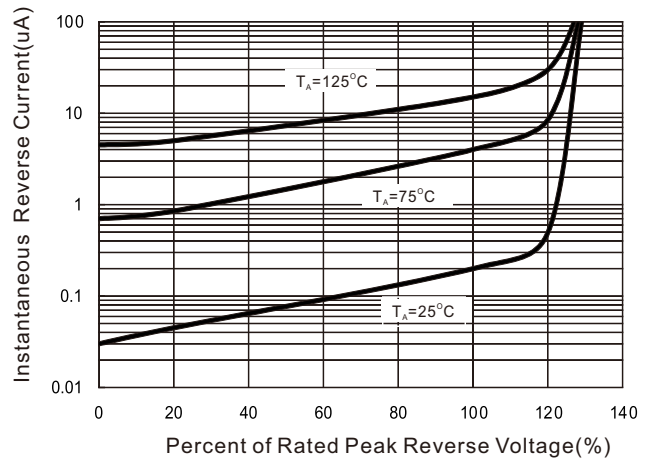
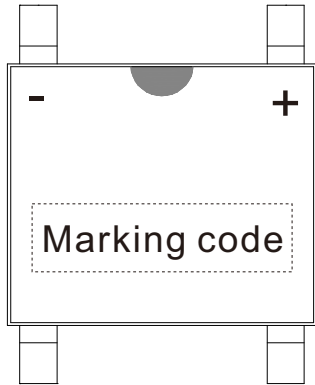


Fig. 4 Typical Reverse Characteristics



### ■ Marking Information



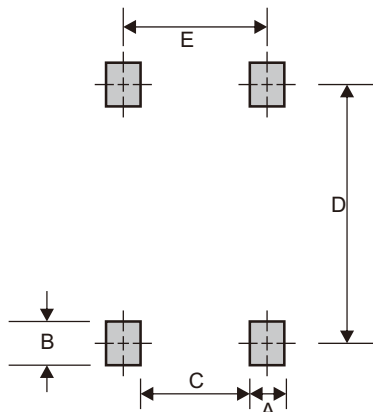
	Part number	Marking Code
Halogen	AB2S	ABS2N
	AB4S	ABS4N
	AB6S	ABS6N
	AB8S	ABS8N
	AB10S	ABS10N
Halogen free	AB2SG	ABS2NH
	AB4SG	ABS4NH
	AB6SG	ABS6NH
	AB8SG	ABS8NH
	AB10SG	ABS10NH

### ■ Ordering/Packing information

Part number		Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen	AB2S	ABS	4,000	8,000	40,000
Halogen free	AB2SG				

Notes : 1. For packaging details please reference our website at <http://www.citcorp.com.tw/tchinese/products/index.php>

### ■ ABS foot print



A	B	C	D	E
0.035 (0.90)	0.059 (1.50)	0.125 (3.20)	0.225 (5.72)	0.161 (4.10)

Dimensions in inches and (millimeters)

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