

Features

- Glass passivated die construction.
- Low forward voltage drop.
- High current capability.
- High surge current capability.
- Design for surface mount application.
- Plastic material-UL flammability 94V-0.
- Suffix "G" indicates Halogen free parts, ex AB102SG-A

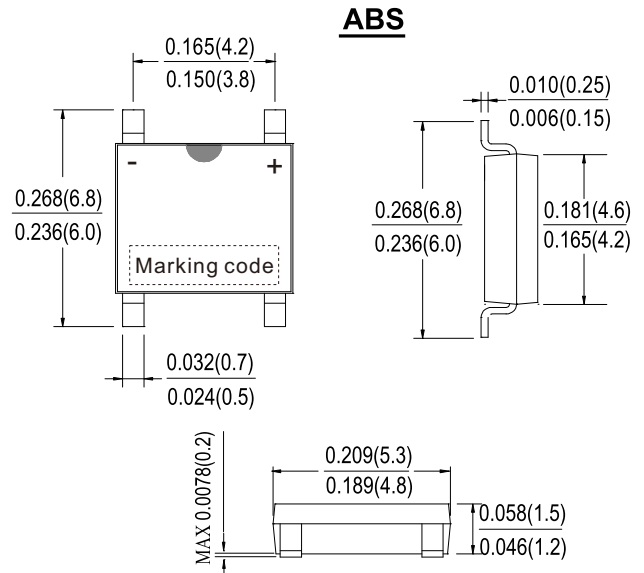
Mechanical data

- 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)

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Average rectified output current	$T_A = 30^\circ\text{C}$ (Note:1)	I_o			0.5	A
	$T_A = 30^\circ\text{C}$ (Note:2)				0.8	
Non-Repetitive Peak Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			30	A
Peak Reverse current at rated DC blocking voltage	$T_A = 25^\circ\text{C}$	I_R			5	uA
	$T_A = 125^\circ\text{C}$				500	
Typical Thermal resistance per leg (Note:3)		R_{BJA}			62.5	$^\circ\text{C/W}$
		R_{BJL}			25	
Storage temperature		T_{STG}	-55 to +150			$^\circ\text{C}$
Operating Junction temperature		T_J	-55 to +150			$^\circ\text{C}$

Symbol	Marking code	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)
AB102S-A	ABS2	200	200	200	140	0.95
AB104S-A	ABS4	400	400	400	280	
AB106S-A	ABS6	600	600	600	420	
AB108S-A	ABS8	800	800	800	560	
AB110S-A	ABS10	1000	1000	1000	700	

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
 2. Mounted on aluminum substrate PC board with 1.3mm² solder pad.
 3. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.

■ Rating and characteristic curves

Fig. 1 Maximum Forward Current Derating Curve

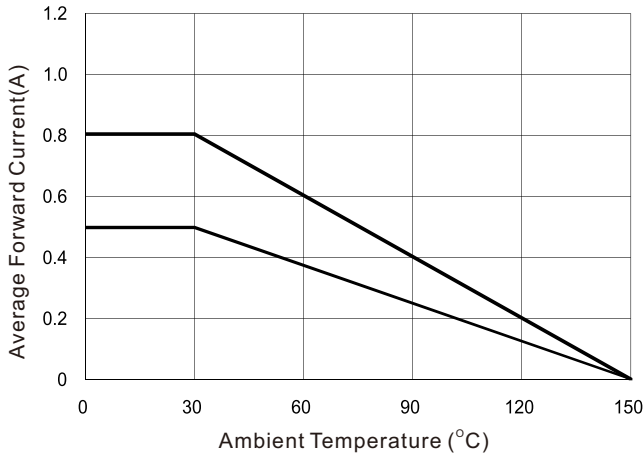


Fig. 2 Typical Forward Characteristics

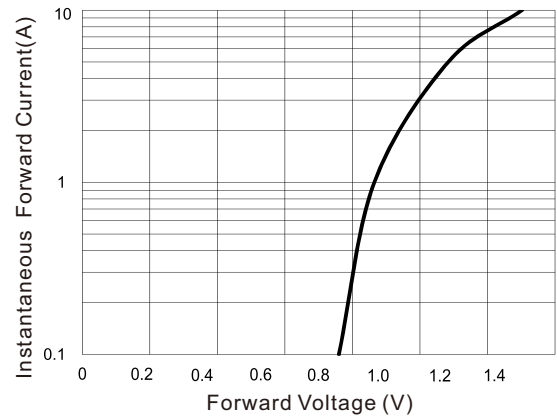


Fig. 3 Maximum Non-Repetitive Forward Surge Current

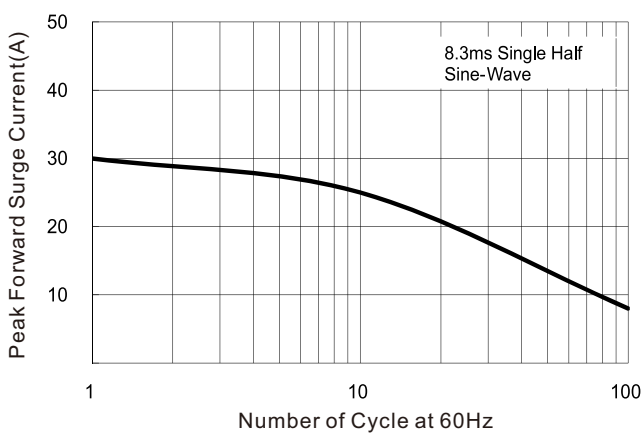
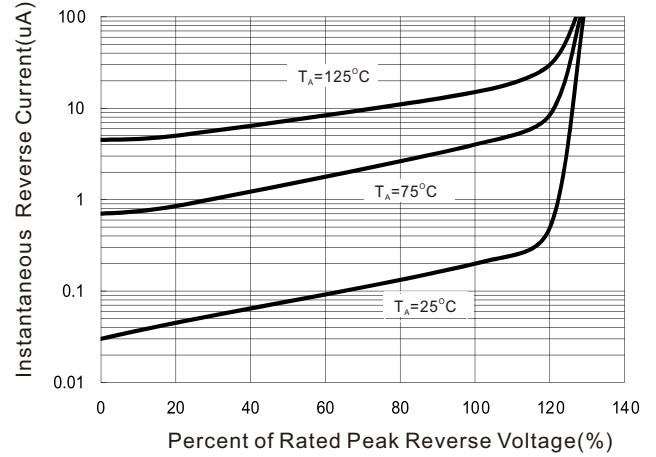
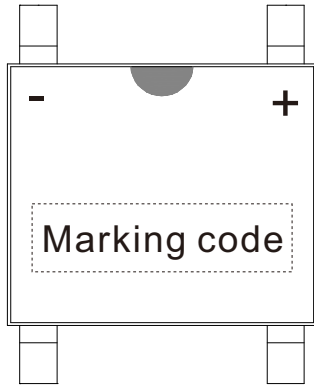


Fig. 4 Typical Reverse Characteristics



■ Marking Information



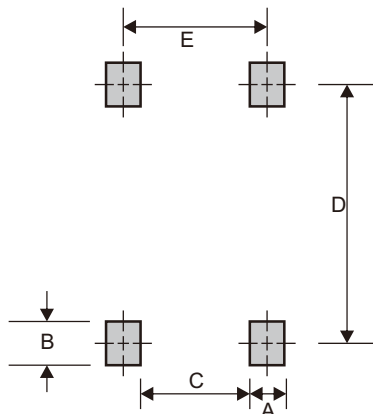
	Part number	Marking Code
Halogen	AB102S-A	ABS2
	AB104S-A	ABS4
	AB106S-A	ABS6
	AB108S-A	ABS8
	AB110S-A	ABS10
Halogen free	AB102SG-A	ABS2H
	AB104SG-A	ABS4H
	AB106SG-A	ABS6H
	AB108SG-A	ABS8H
	AB110SG-A	ABS10H

■ Ordering/Packing information

Part number		Case	Q'TY/Reel (PCS)	Q'TY/Box (PCS)	Q'TY/Carton (PCS)
Halogen	AB102S-A	ABS	4,000	8,000	40,000
Halogen free	AB102SG-A				

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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