

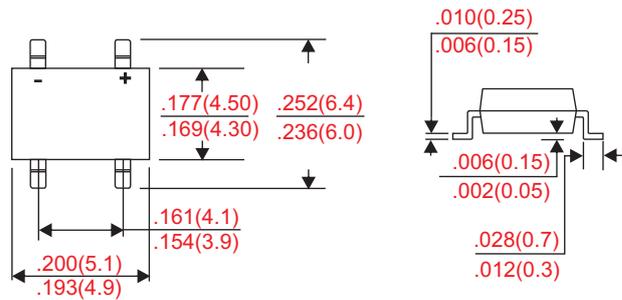
1A Miniature Glass Passivated Single-Phase Surface Mount Bridge Rectifiers

■ Features

- Rating to 1000V PRV.
- Ideal for printed circuit board.
- Ideal for automated replacement.
- Reliable low cost construction utilizing molded plastic technology results in inexpensive product.
- Glass passivated chip junctions.
- High temperature soldering guaranteed:
260°C /10 seconds
- Suffix "G" indicates Halogen-free part, ex. AB102SG.

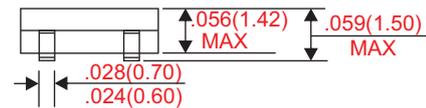
■ Outline

ABS



■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, ABS
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Symbol molded on body



Dimensions in inches and (millimeters)

■ 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%.

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	UNIT
Average rectified output current	on aluminum substrate at $T_A = 25^\circ\text{C}$	I_o			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			10	uA
	$V_R = V_{RRM}$ $T_A = 125^\circ\text{C}$				500	
Current squared time	$t < 8.3\text{ms}$, $T_J = 25^\circ\text{C}$	I^2t			3.7	A^2S
Thermal resistance	junction to ambient	R_{BJA}			62.5	$^\circ\text{C}/\text{W}$
Storage temperature		T_{STG}	-55		+150	$^\circ\text{C}$

Symbol	Marking code	Max. repetitive peak reverse voltage V_{RRM} (V)	Max. RMS voltage V_{RMS} (V)	Max. DC blocking voltage V_R (V)	Max. forward voltage @0.4A, $T_A = 25^\circ\text{C}$ V_F (V)	Operating temperature T_J ($^\circ\text{C}$)
AB102S	ABS2	200	140	200	0.95	-55 ~ +150
AB104S	ABS4	400	280	400		
AB106S	ABS6	600	420	600		
AB108S	ABS8	800	560	800		
AB110S	ABS10	1000	700	1000		

■ Rating and characteristic curves

FIG.1-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER

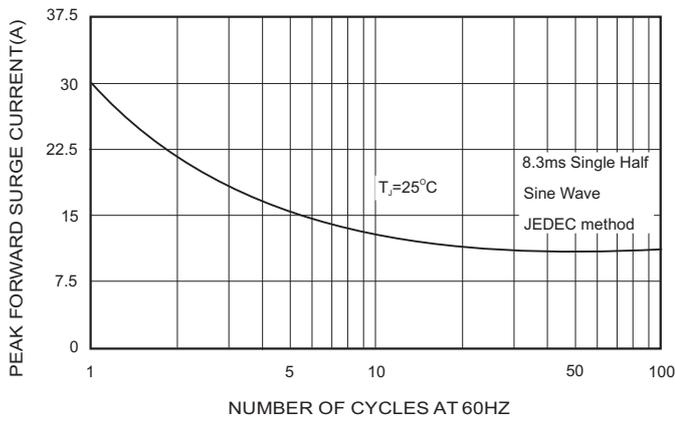


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

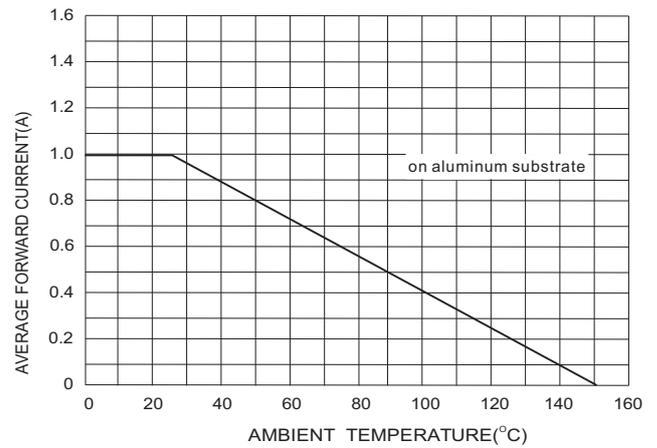


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

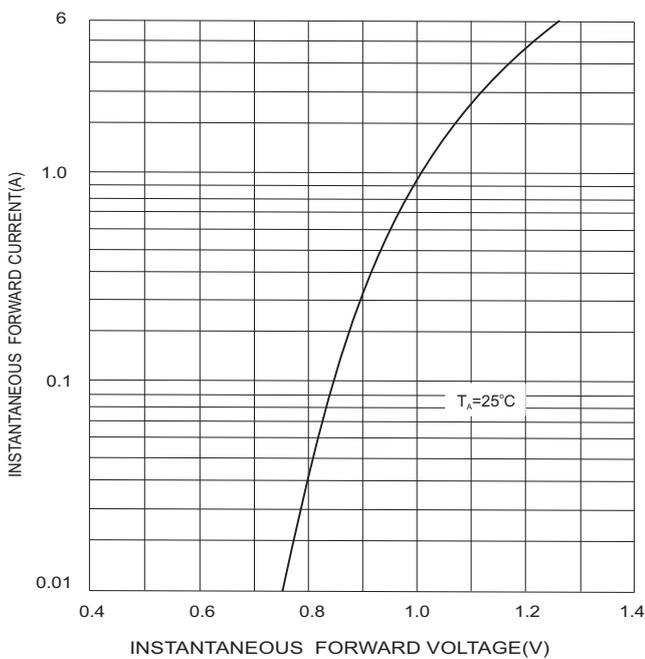
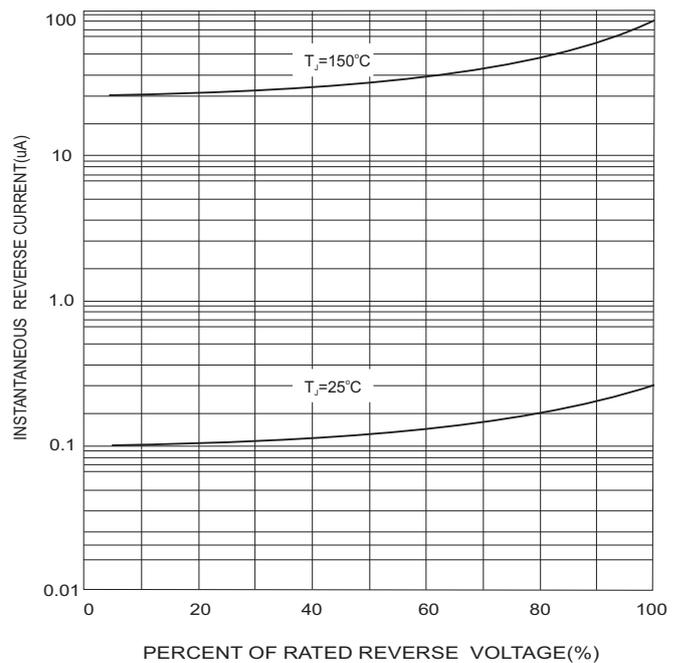
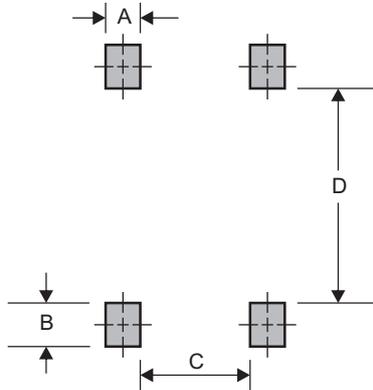


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



■ ABS foot print



A	B	C	D
0.024 (0.60)	0.024 (0.60)	0.132 (3.35)	0.193 (4.90)

Dimensions in inches and (millimeters)

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