

ABF2 THRU ABF10

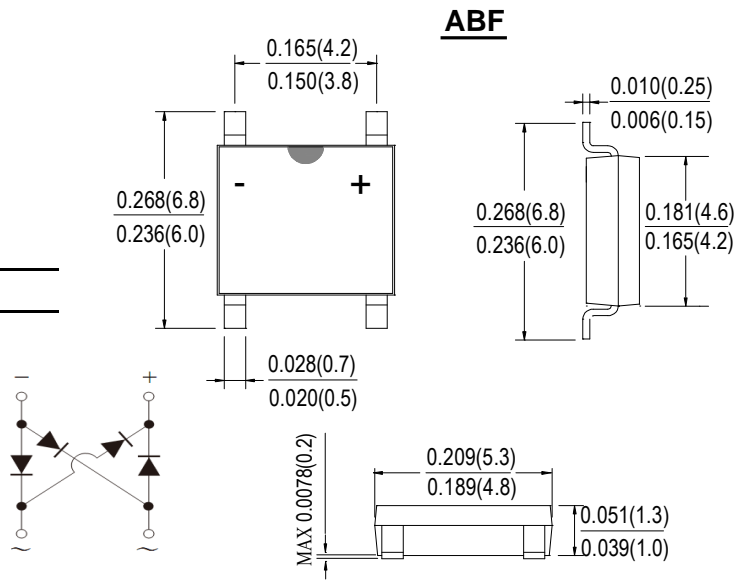
SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

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



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%.

TYPE NUMBER	SYMBOL	ABF2	ABF4	ABF6	ABF8	ABF10	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM}	200	400	600	800	1000	V
	V_{RWM}						
	V_{DC}						
RMS Reverse Voltage	V_{RMS}	140	280	420	560	700	V
Average Rectified Output Current (Note 1)@ $T_c=100^\circ\text{C}$ (Note 2)@ $T_c=100^\circ\text{C}$	$I_F(AV)$	0.5 0.8					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30					A
Rating for fusing ($t < 8.3\text{ms}$)	$I^2 t$	3.74					$\text{A}^2 \text{s}$
Forward Voltage per element @ $I_F=0.5\text{A}$ @ $I_F=0.8\text{A}$	V_{FM}	0.95 1.0					V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 200					μA
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	62.5					$^\circ\text{C/W}$
	$R_{\theta JL}$	25					
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150					$^\circ\text{C}$

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 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

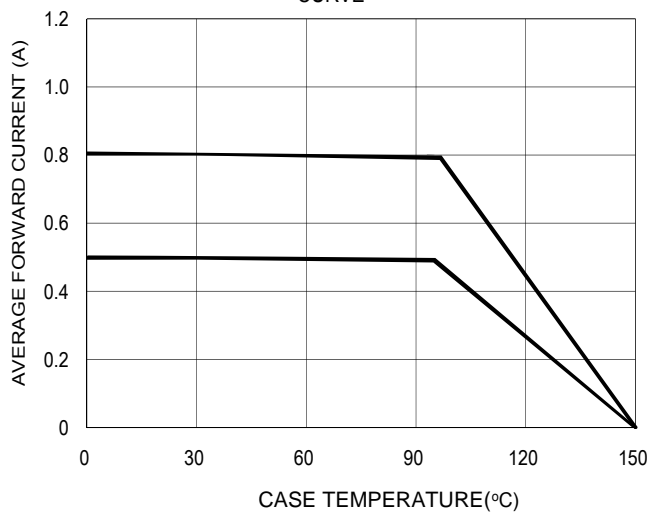


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

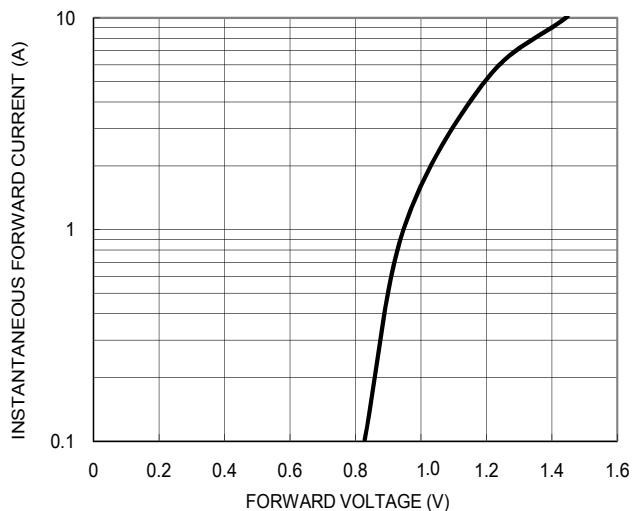


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

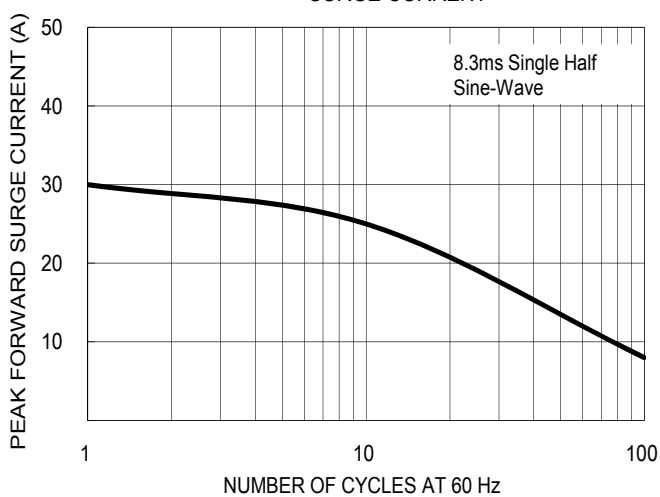
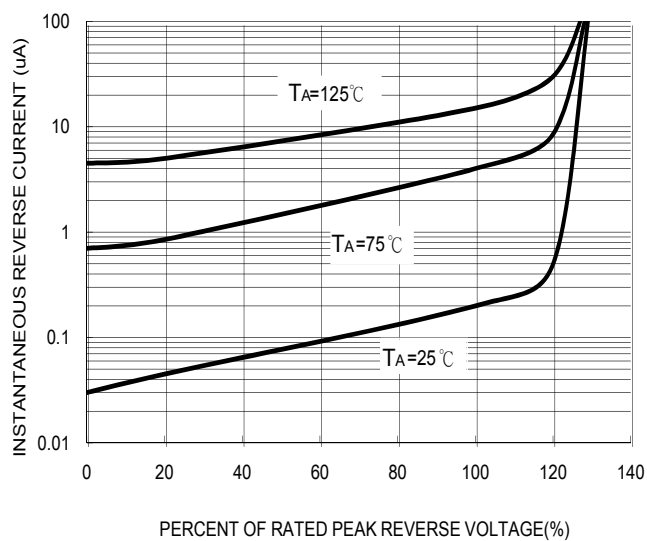
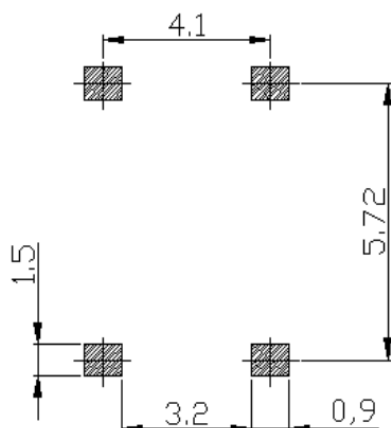


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



PAD LAYOUT



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