



# ABS2 THRU ABS10

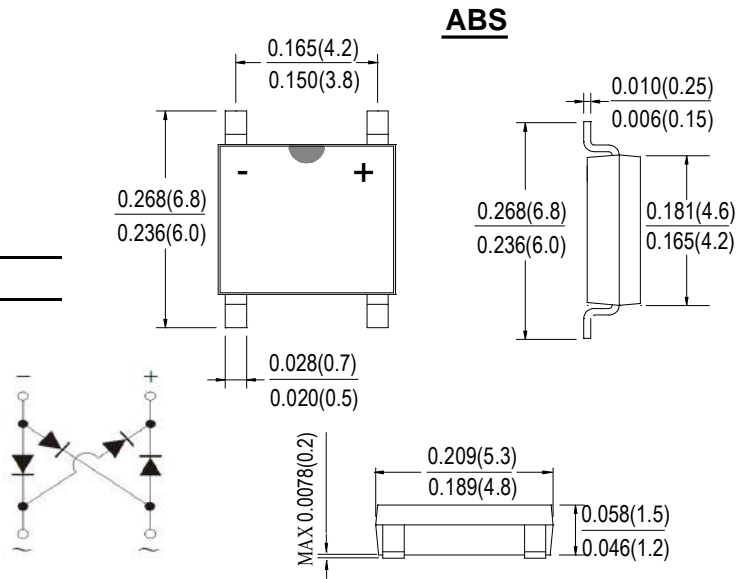
## SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

### 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 ABS
- 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	ABS2	ABS4	ABS6	ABS8	ABS10	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$						
	$V_{RWM}$	200	400	600	800	1000	V
	$V_{DC}$						
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
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$			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 @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	$I_R$			5.0 100			$\mu\text{A}$
Typical Junction Capacitance (Note3)	$C_J$			13			pF
Typical Thermal Resistance	$R_{\theta JA}$			62.5			$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$			25			
Operating and Storage Temperature Range	$T_J, T_{STG}$			-55to+150			$^\circ\text{C}$

Note:1. Mounted on glass epoxy PC board with  $1.3\text{mm}^2$  solder pad.

2. Mounted on aluminum substrate PC board with  $1.3\text{mm}^2$  solder pad.

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



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FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

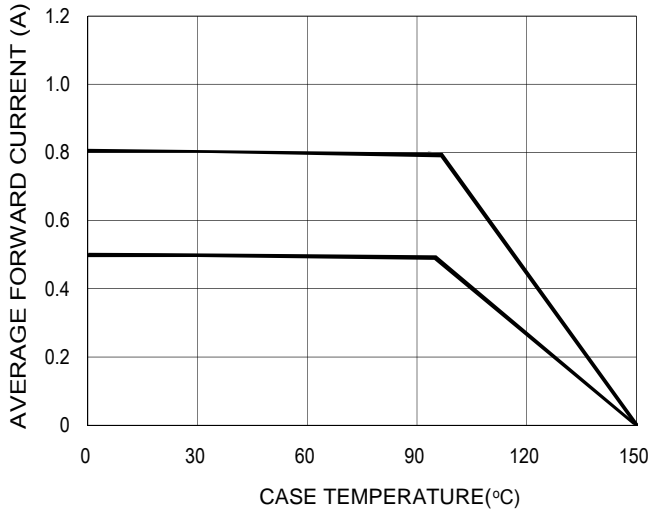


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

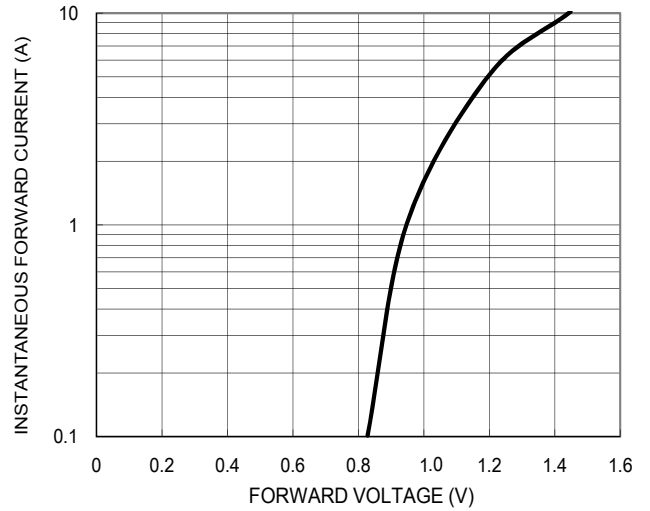


Fig. 3 Maximum Peak Forward Surge Current

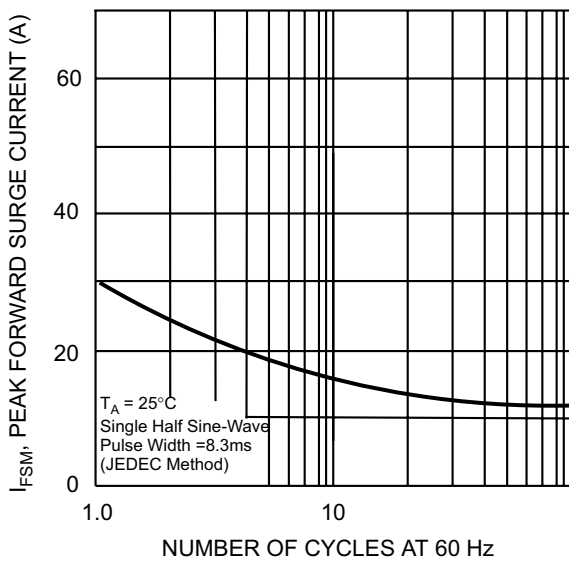


Fig. 4 Typical Reverse Characteristics

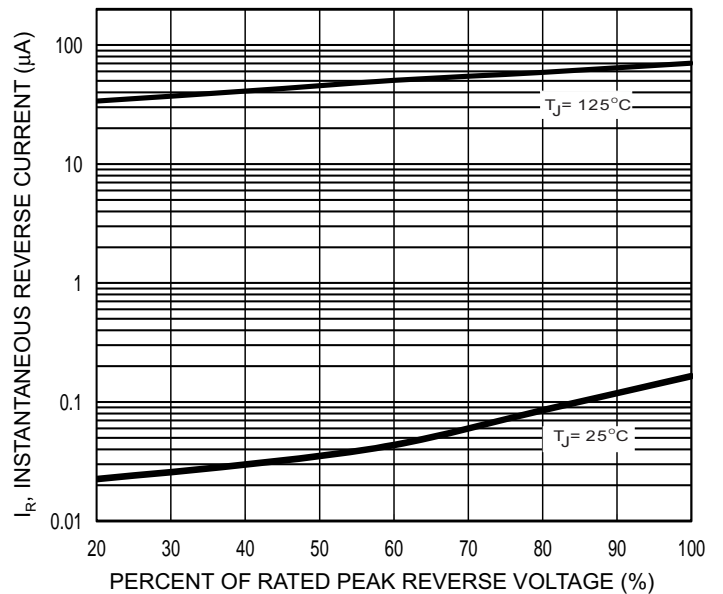
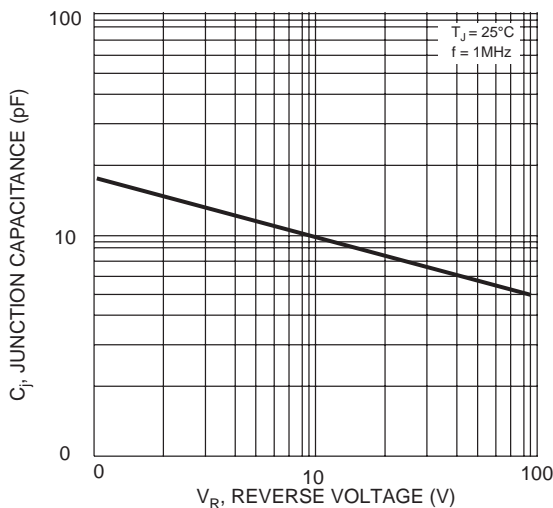
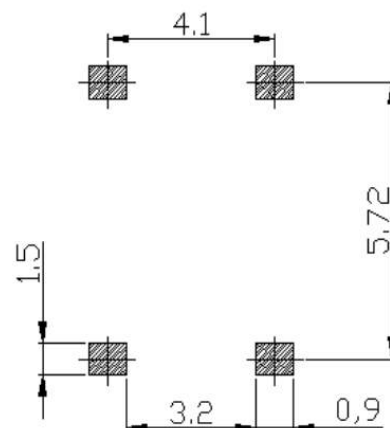


Fig. 5 Typical Junction Capacitance



PAD LAYOUT





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