

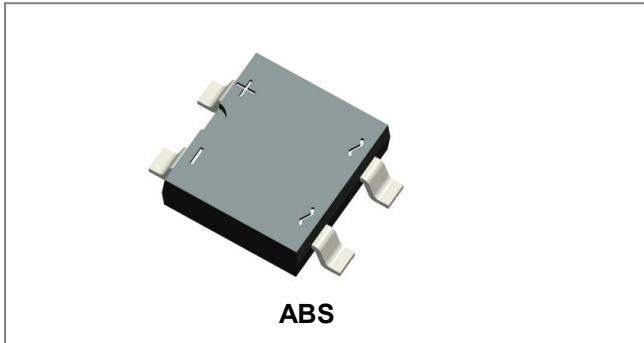


# THE DATASHEET OF ABS4



## ABS2 THRU ABS10

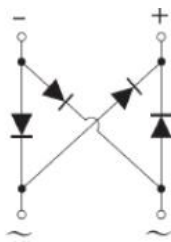
### SINGLE PHASE 0.8AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



#### 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
- This is a Pb – Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

#### Circuit Diagram



#### 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

#### Maximum Ratings@T<sub>A</sub>=25°C unless otherwise specified

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum Average Rectified Output Current (Note 1)@T <sub>A</sub> =30°C (Note 2)@T <sub>A</sub> =30°C	I <sub>(AV)</sub>	0.5			0.8		V
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30					A

**Electrical Characteristics @  $T_A=25^\circ\text{C}$  unless otherwise specified**

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Maximum Forward Voltage (per element) @ $I_F=0.8\text{A}$	$V_F$	1.1					V
Maximum Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 500					$\mu\text{A}$

\* Pulse width < 300  $\mu\text{s}$ , duty cycle < 2%

**Thermal-Mechanical Specifications @  $T_A=25^\circ\text{C}$  unless otherwise specified**

Type Number	Symbol	ABS2	ABS4	ABS6	ABS8	ABS10	Units
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25					$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150					$^\circ\text{C}$

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

**Ratings and Characteristics Curves**

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

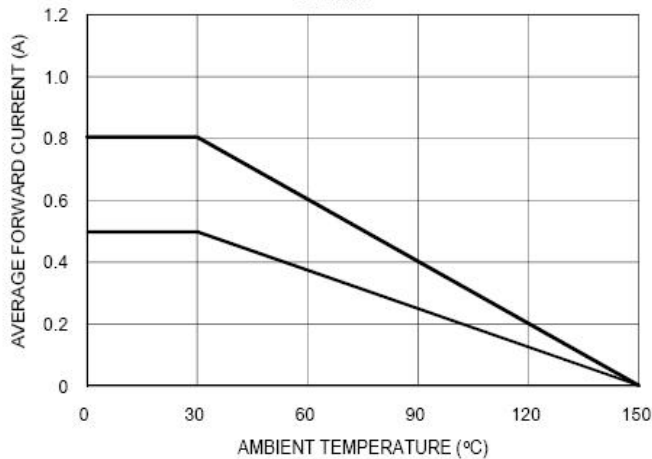


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

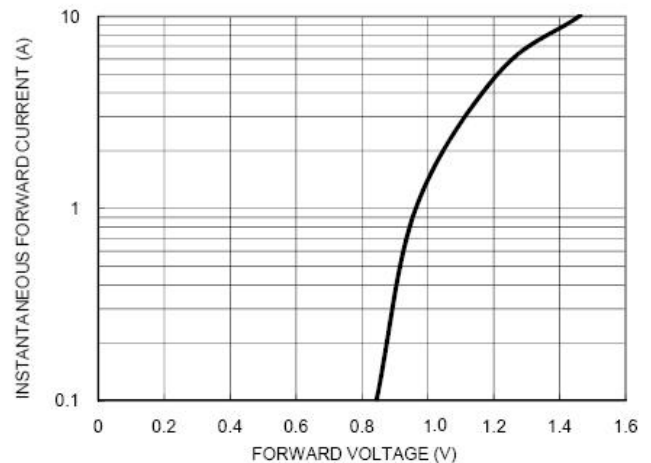


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

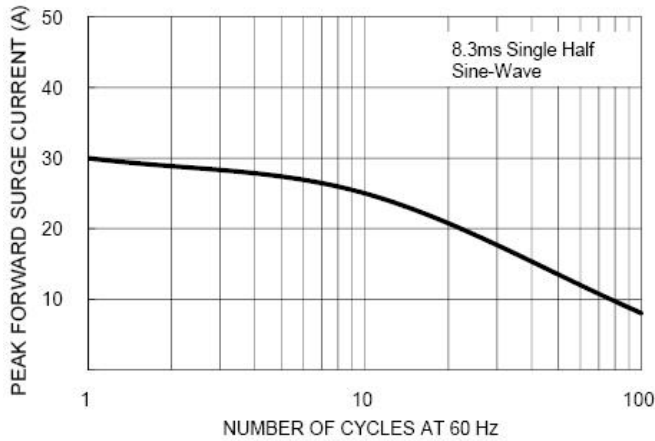
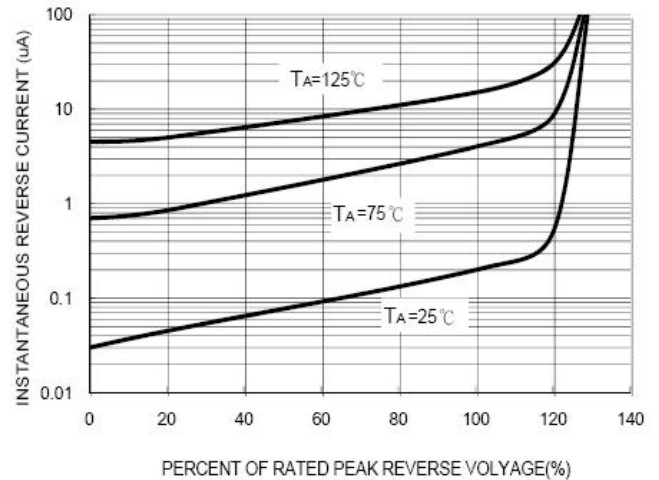
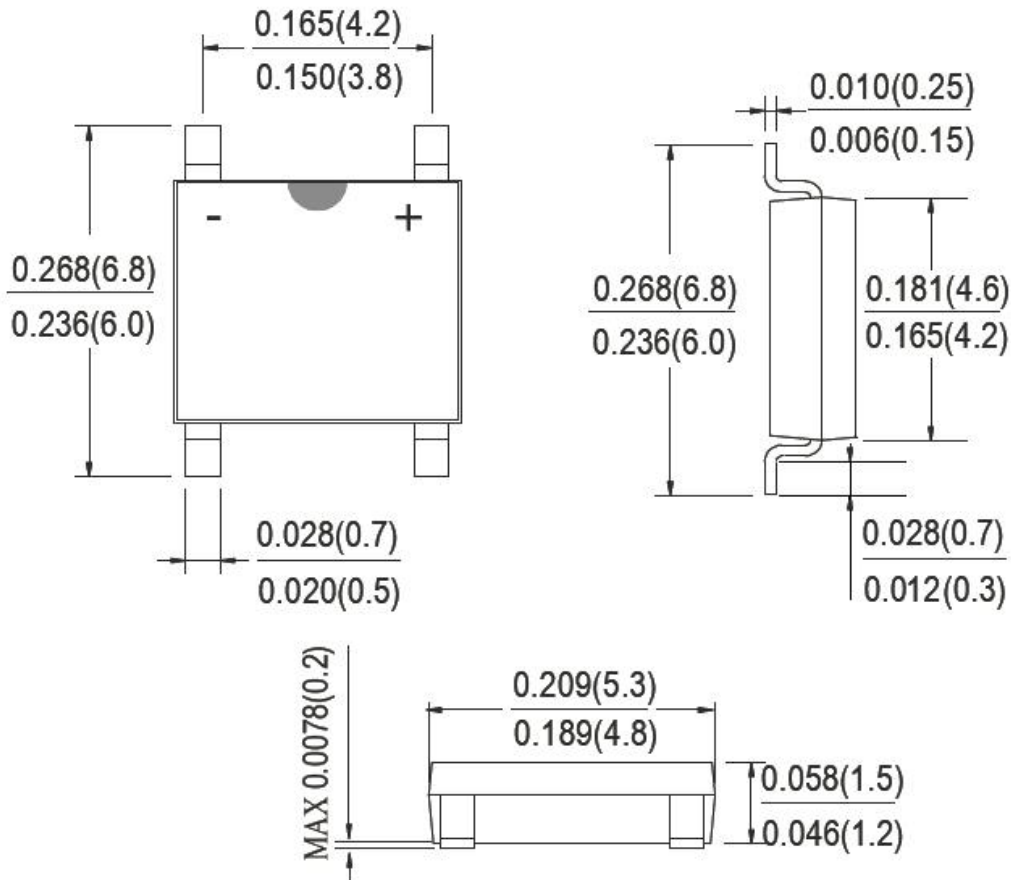


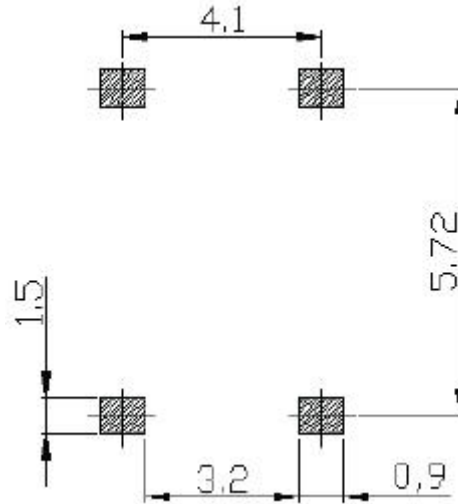
FIG. 4 TYPICAL REVERSE CHARACTERISTICS



**Mechanical Dimensions ABS(Inches/Millimeters)**



**Pad Layout(Millimeters)**

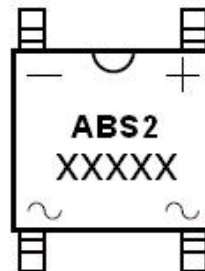


**Ordering Information**

Device	Package	Plating	Shipping
ABS2 THRU ABS10	ABS (Pb-Free)	Pure Sn	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

**Marking Diagram**

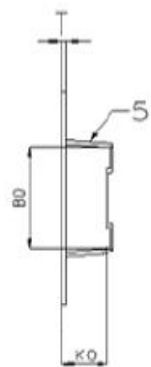
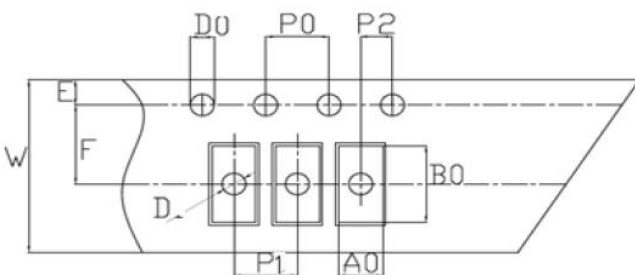


Where XXXXX is YYWWL

ABS2 = Type Number  
YY = Year  
WW = Week  
L = Lot Number

**Cautions:** Molding resin  
Epoxy resin UL:94V-0

**Carrier Tape Specification ABS**



SYMBOL	Millimeters	
	Min.	Max.
A0	5.21	5.41
B0	7.10	7.30
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	1.55	1.75
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20

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