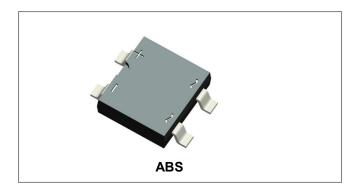






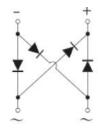
ABS2U THRU ABS10U SINGLE PHASE 1.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



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 caseMounting Position: Any

Maximum Ratings@T_A=25°C unless otherwise specified

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

Type Number	Symbol	ABS2U	ABS4U	ABS6U	ABS8U	ABS10U	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _{DC}	200	400	600	800	1000	V
RMS Reverse Voltage	V _{RMS}	140	280	420	560	700	V
Maximum Average Rectified Output Current @T _A =30°C	I _(AV)	1				٧	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35				Α	

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •







Electrical Characteristics@T_A=25°C unless otherwise specified

Type Number	Symbol	ABS2U	ABS4U	ABS6U	ABS8U	ABS10U	Units
Maximum Forward Voltage (per element) @I _F =1A	V _F	1.1		٧			
Maximum Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _R	5.0 500			μA		

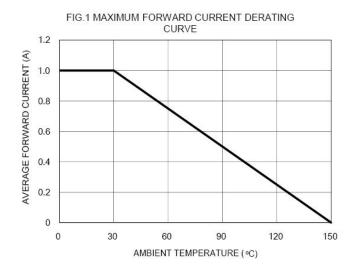
 $^{^*}$ Pulse width < 300 μ s, duty cycle < 2%

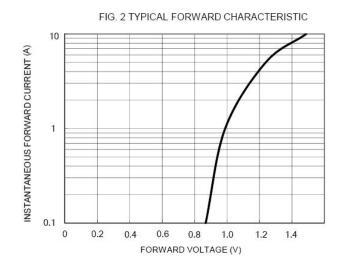
Thermal-Mechanical Specifications@TA=25°C unless otherwise specified

Type Number	Symbol	ABS2U	ABS4U	ABS6U	ABS8U	ABS10U	Units
Typical Thermal Resistance(Note 1)	R _{0JA} R _{0JL}	62.5 25			°C/W		
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150			°C		

Note: 1. Thermal resistance form junction to ambient and junction to lead mounted on P.C.B. with 0.2X0.2"(5X5mm) copper pads.

Ratings and Characteristics Curves



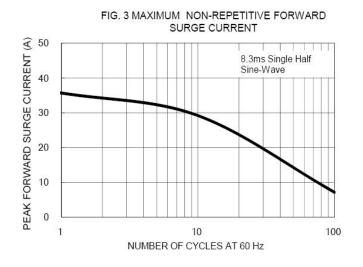


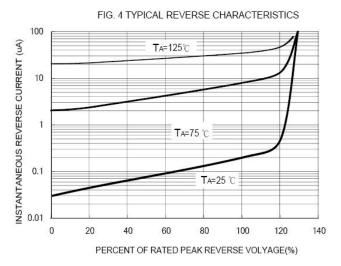
- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •



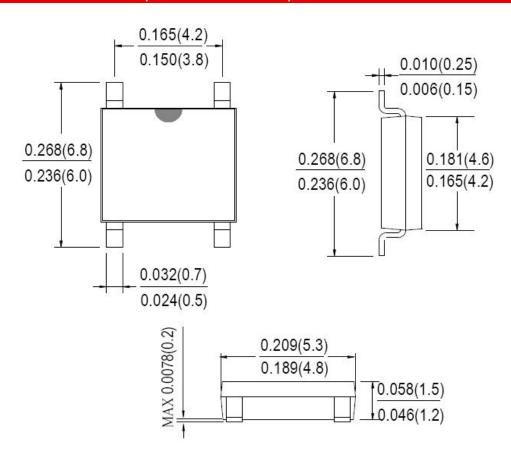








Mechanical Dimensions ABS(Inches/Millimeters)



- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •





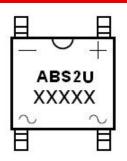


Ordering Information

Device	Package	Shipping
ABS2U THRU ABS10U	ABS (Pb-Free)	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

 ABS2U
 = Type Number

 YY
 = Year

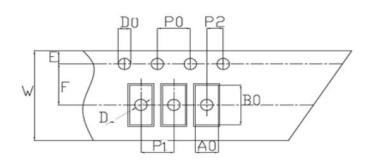
 WW
 = Week

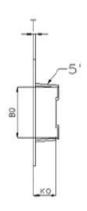
 L
 = Lot Number

Cautions: Molding resin

Epoxy resin UL:94V-0

Carrier Tape Specification ABS





SYMBOL	Millimet	ers		
STWIBOL	Min.	Max.		
A0	5.21	5.41		
В0	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		
Т	0.24	0.30		
10P0	39.80	40.20		

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com sales@ smc-diodes.com •









DISCLAIMER:

- 1- The information given herein, including the specifications and dimensions, is subject to change without prior notice to improve product characteristics. Before ordering, purchasers are advised to contact the SMC Sangdest Microelectronics (Nanjing) Co., Ltd sales department for the latest version of the datasheet(s).
- 2- In cases where extremely high reliability is required (such as use in nuclear power control, aerospace and aviation, traffic equipment, medical equipment, and safety equipment), safety should be ensured by using semiconductor devices that feature assured safety or by means of users' fail-safe precautions or other arrangement.
- 3- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any damages that may result from an accident or any other cause during operation of the user's units according to the datasheet(s). SMC Sangdest Microelectronics (Nanjing) Co., Ltd assumes no responsibility for any intellectual property claims or any other problems that may result from applications of information, products or circuits described in the datasheets.
- 4- In no event shall SMC Sangdest Microelectronics (Nanjing) Co., Ltd be liable for any failure in a semiconductor device or any secondary damage resulting from use at a value exceeding the absolute maximum rating.
- 5- No license is granted by the datasheet(s) under any patents or other rights of any third party or SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 6- The datasheet(s) may not be reproduced or duplicated, in any form, in whole or part, without the expressed written permission of SMC Sangdest Microelectronics (Nanjing) Co., Ltd.
- 7- The products (technologies) described in the datasheet(s) are not to be provided to any party whose purpose in their application will hinder maintenance of international peace and safety nor are they to be applied to that purpose by their direct purchasers or any third party. When exporting these products (technologies), the necessary procedures are to be taken in accordance with related laws and regulations..