

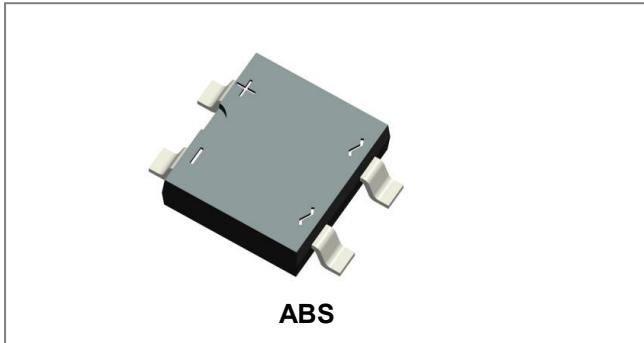


THE DATASHEET OF ABS10U



ABS2U THRU ABS10U

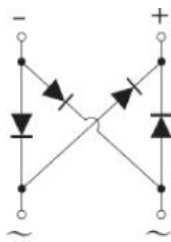
SINGLE PHASE 1.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



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
- “-HF” suffix is for Halogen 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 and Electrical Characteristics @ $T_A=25^\circ\text{C}$ 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
ABS2U-HF THRU ABS10U-HF Marking Code		ABS2UH	ABS4UH	ABS6UH	ABS8UH	ABS10UH	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 @ $T_A=30^\circ\text{C}$	$I_{(AV)}$	1					V
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A

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

Type Number	Symbol	ABS2U	ABS4U	ABS6U	ABS8U	ABS10U	Units
ABS2U-HF THRU ABS10U-HF Marking Code		ABS2UH	ABS4UH	ABS6UH	ABS8UH	ABS10UH	Units
Maximum Forward Voltage (per element) @ $I_F = 1\text{A}$	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					μA

* Pulse width < 300 μs , duty cycle < 2%

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

Type Number	Symbol	ABS2U	ABS4U	ABS6U	ABS8U	ABS10U	Units
ABS2U-HF THRU ABS10U-HF Marking Code		ABS2UH	ABS4UH	ABS6UH	ABS8UH	ABS10UH	Units
Typical Thermal Resistance(Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25					$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150					$^\circ\text{C}$

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

Ratings and Characteristics Curves

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

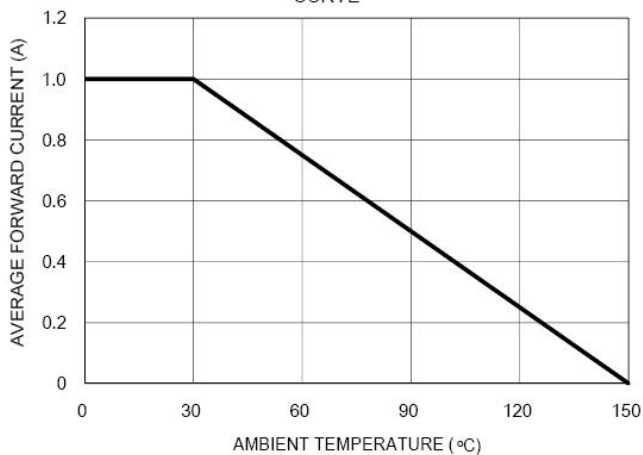


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

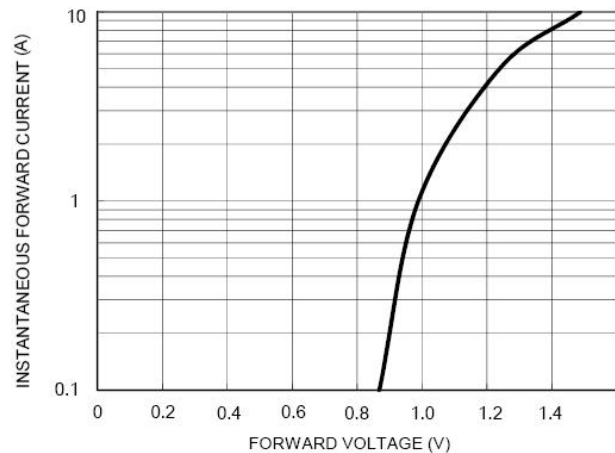


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

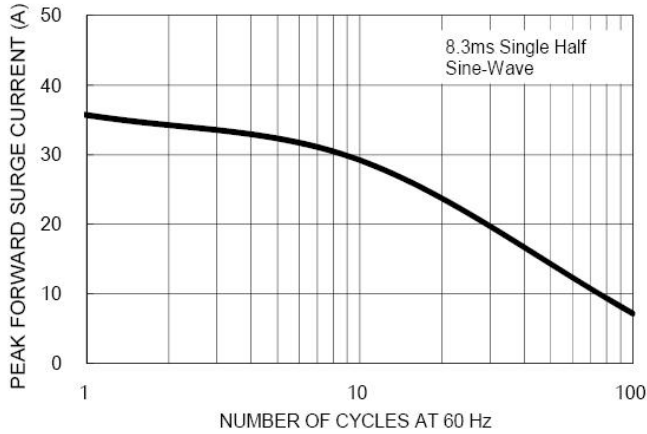
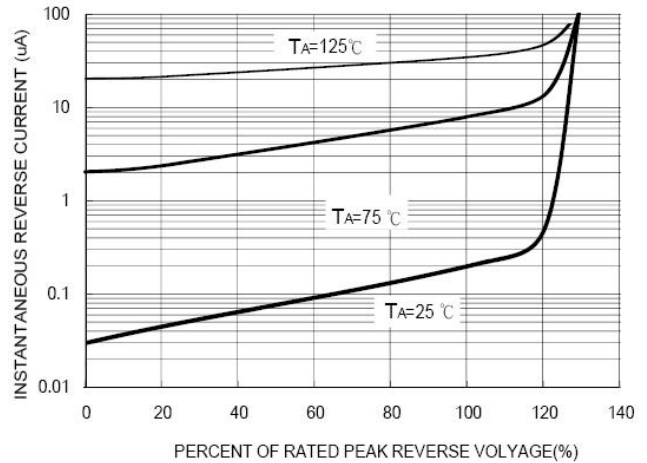
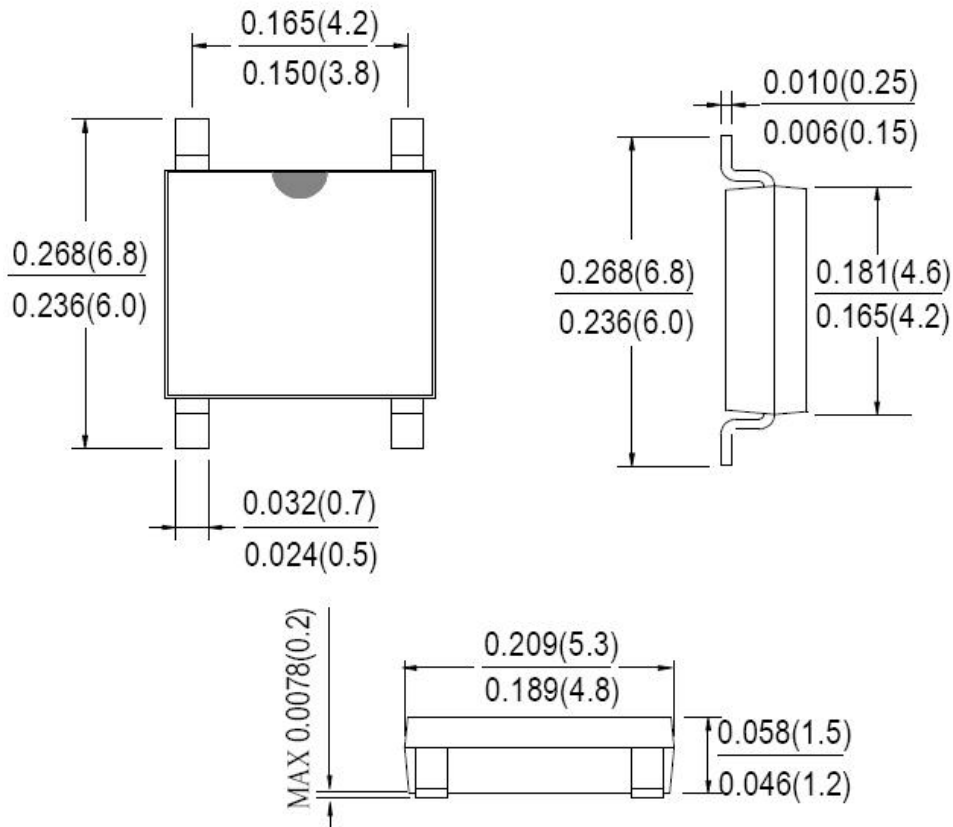


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



Mechanical Dimensions ABS(Inches/Millimeters)

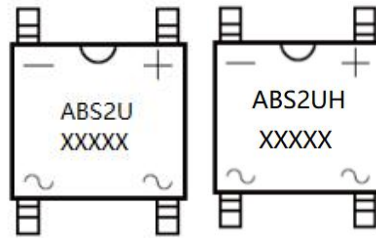


Ordering Information

Device	Package	Plating	Shipping
ABS2U THRU ABS10U	ABS	Pure Sn	5000pcs / reel
ABS2UTR THRU ABS10UTR	ABS	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



ABS2U

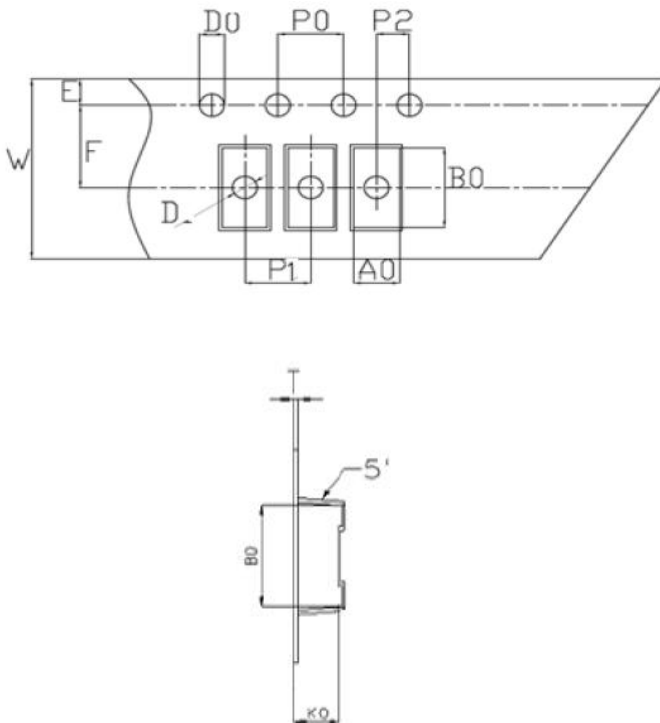
ABS2U-HF

Where XXXXX is YYWWL

ABS2U = Type Number
ABS2UH = Marking Code
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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