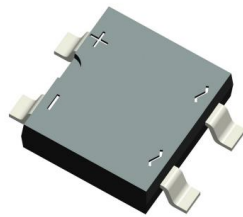


ABF2U THRU ABF10U

SINGLE PHASE 1.0AMP SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

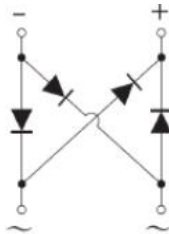


ABF

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 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 ABF
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
- Polarity: Polarity symbols marked on case
- Mounting 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%.

Characteristic	Symbol	ABF2U	ABF4U	ABF6U	ABF8U	ABF10U	Units
Maximum repetitive peak reverse voltage	V _{RRM}	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	140	280	420	560	700	
Maximum DC blocking voltage	V _{DC}	200	400	600	800	1000	
Average Rectified Output Current @T _C = 100°C	I _{F(AV)}	1.0					V
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	35					A
Rating for fusing (t<8.3ms)	I ² t	5.08					A ² s

Electrical Characteristics:

Characteristic	Symbol	ABF2U	ABF4U	ABF6U	ABF8U	ABF10U	Units
Forward voltage per element @ $I_F = 0.5A$ @ $I_F = 1.0A$	V_F			0.95 1.0			V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^\circ C$ $T_A = 125^\circ C$	I_R			5 200			μA

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

Thermal-Mechanical Specifications:

Characteristic	Symbol	ABF2U	ABF4U	ABF6U	ABF8U	ABF10U	Units
Typical thermal resistance per leg (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$			62.5 25			$^\circ C/W$
Operating and storage temperature range	T_J, T_{STG}			-55 to +150			$^\circ C$

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

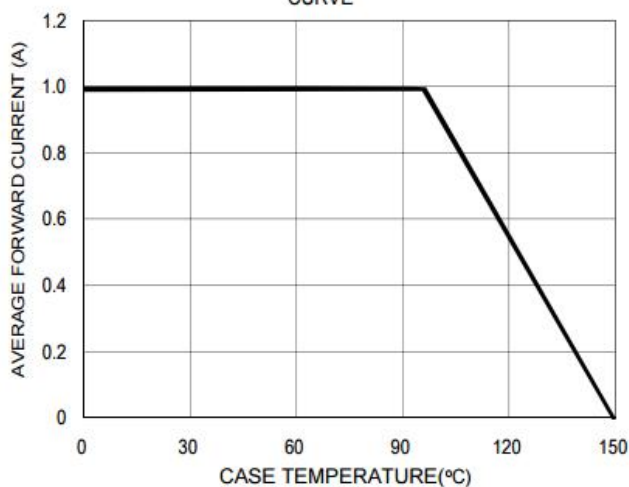


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

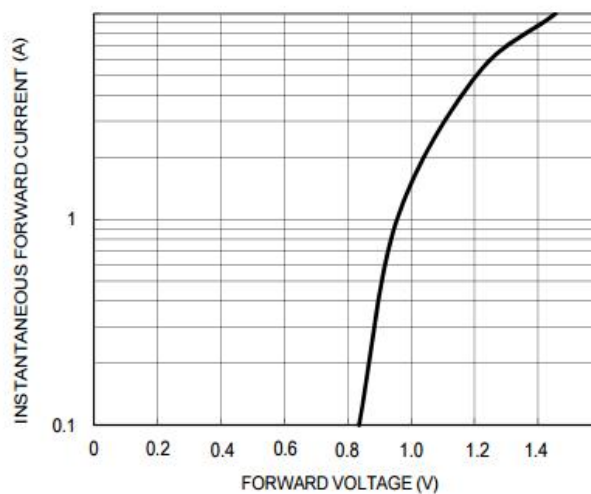
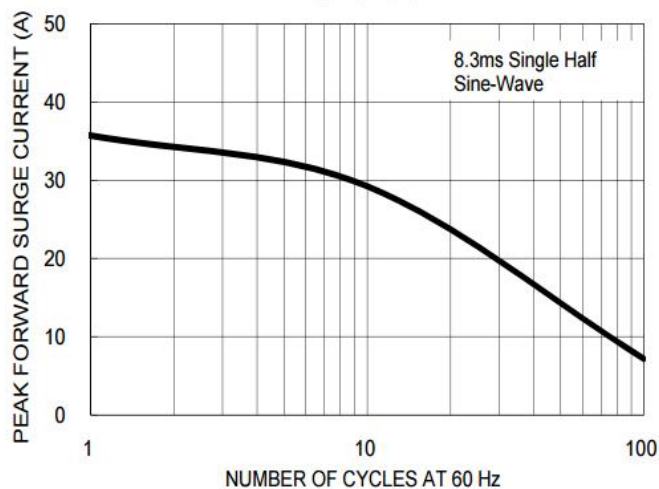


FIG. 3 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



PAD LAYOUT

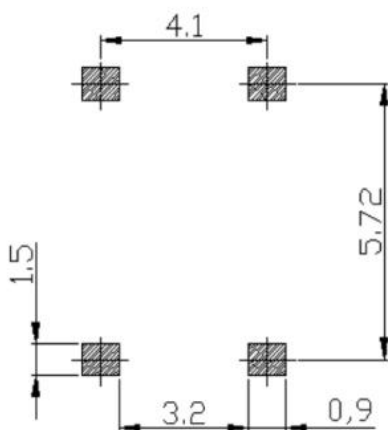
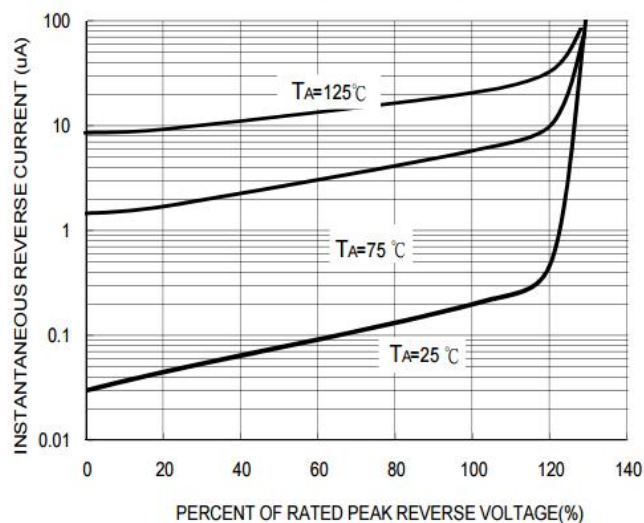


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

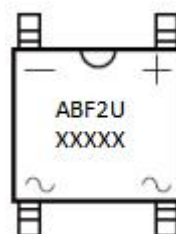


Ordering Information

Device	Package	Shipping
ABF2U THRU ABF10U	ABF	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

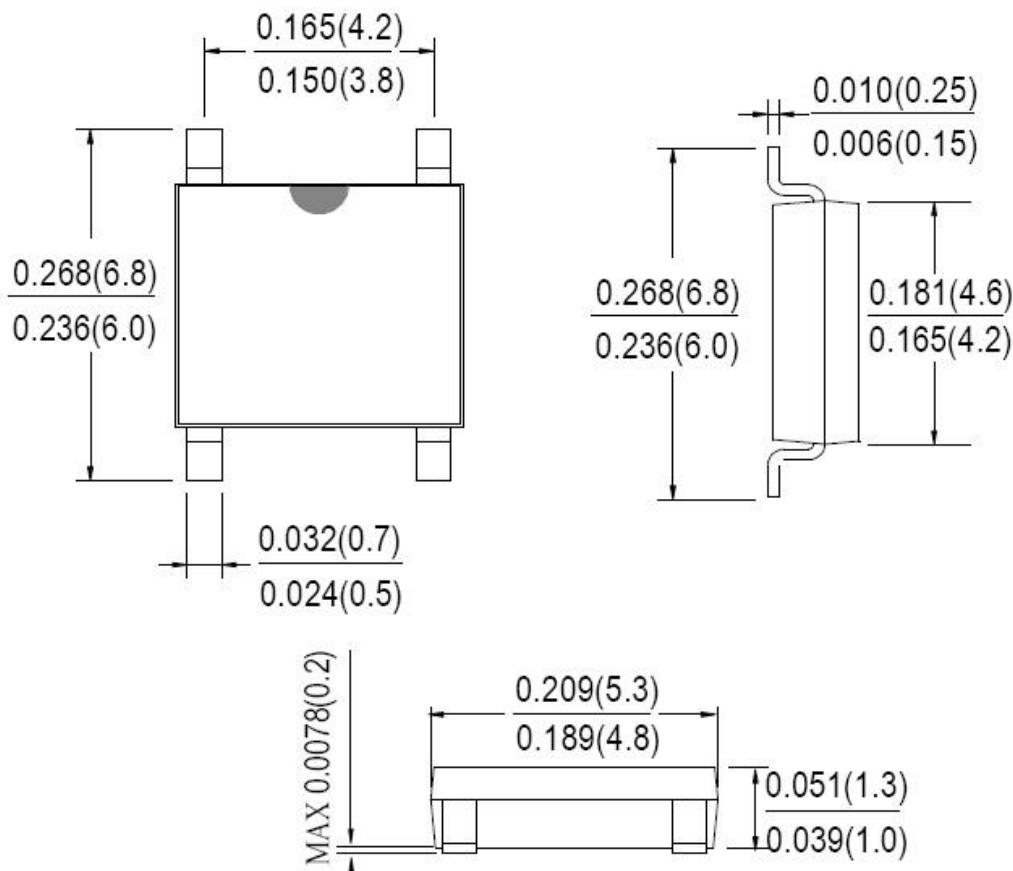


Where XXXXX is YYWWL

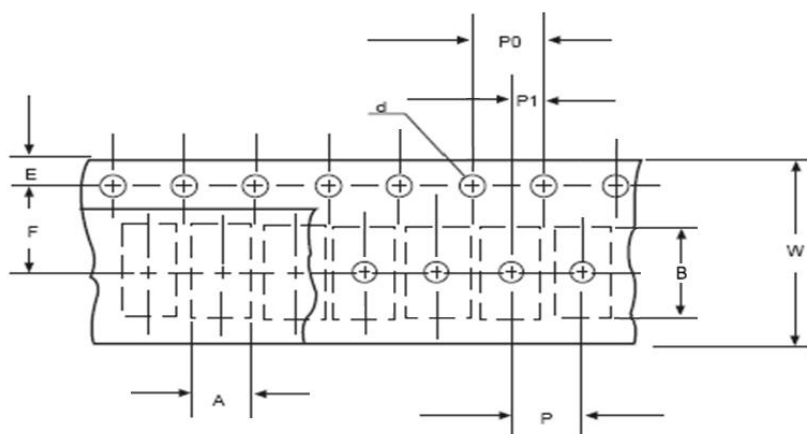
ABF2U = Type Number
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL94V-0

Mechanical Dimensions ABF(Inches/Millimeters)



Carrier Tape & Reel Specification ABF



SYMBOL	Millimeters	
	Min.	Max.
A	5.00	5.40
B	6.40	6.80
d	1.40	1.60
E	1.40	1.60
F	5.55	5.75
P	3.90	4.10
P0	3.90	4.10
P1	1.90	2.10
W	11.50	12.50

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