

1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

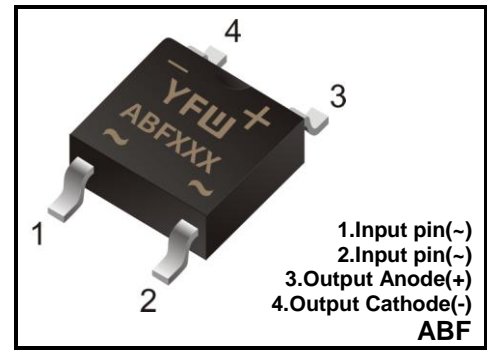
Forward Current – 1.0A

FEATURES

- ◆Fast reverse recovery time
- ◆Designed for Surface Mount Application
- ◆Glass Passivated Chip Junction
- ◆Low power loss, high efficiency
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- ◆Case: ABFTerminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 82mg / 0.0029oz



Type number	Marking code
ABF1	ABF1
ABF2	ABF2
ABF4	ABF4
ABF6	ABF6
ABF8	ABF8
ABF10	ABF10

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	ABF1	ABF2	ABF4	ABF6	ABF8	ABF10	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_c = 125\text{ }^\circ\text{C}$	I_o	1.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	40						A
Forward Voltage per element at 1.0A	V_F	0.95						V
Maximum DC Reverse Current @ $T_A = 25\text{ }^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_A = 125\text{ }^\circ\text{C}$	I_R	5.0 50						μA
Typical Junction Capacitance ^(Note1)	C_j	13						pF
Typical Thermal Resistance ^(Note3)	$R_{\theta JA}$ $R_{\theta JC}$	75 20						$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						$^\circ\text{C}$

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) Mounted on glass epoxy PC board with 4x1.5"x1.5" (3.81x3.81 cm) copper pad.

Ratings And Characteristic Curves

Fig.1 Average Rectified Output Current Derating Curve

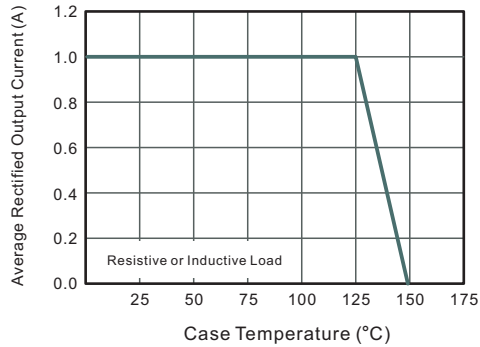


Fig.2 Typical Reverse Characteristics

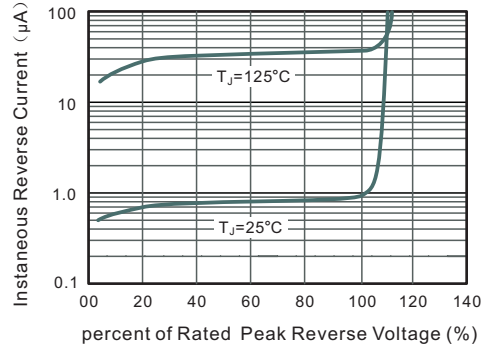


Fig.3 Typical Instantaneous Forward Characteristics

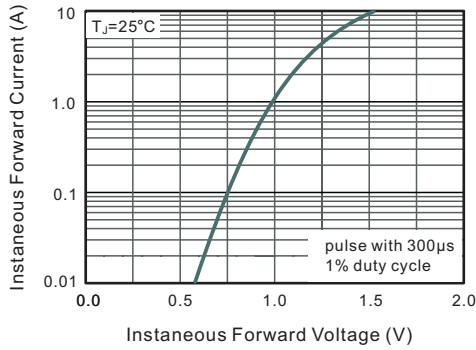


Fig.4 Typical Junction Capacitance

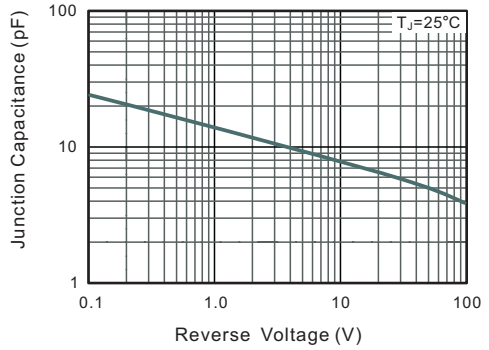
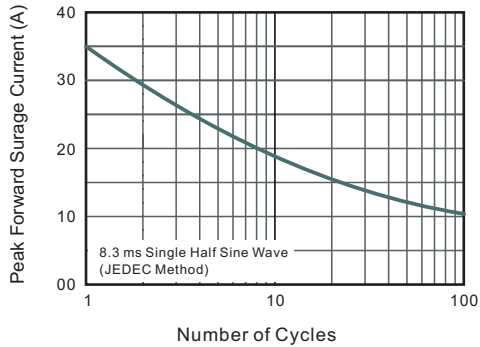
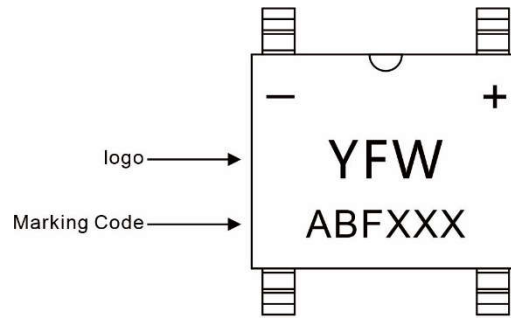


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



Marking Diagram



Ordering information

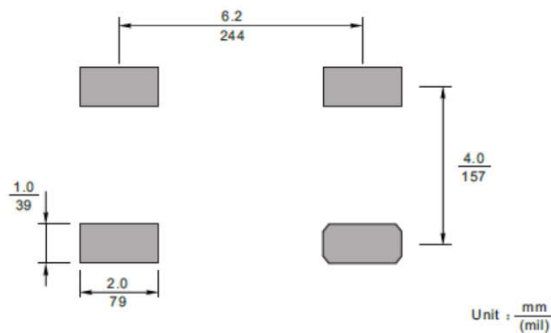
Package	Packing Description	Packing Quantity
ABF	Tape/Reel, 13" reel	5000PCS/Reel 50000PCS/Carton

Package Dimensions

ABF

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.0	1.2	39	47
C	0.15	0.22	5.9	8.7
D	4.9	5.2	193	205
E	4.2	4.5	166	177
HE	6.0	6.4	236	252
d	3.8	4.2	150	165
e	0.5	0.7	20	28
L	0.95		37	
L1	0.6		24	
a	0.2		8	
∠	7°			

The recommended mounting pad size



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