

## 1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

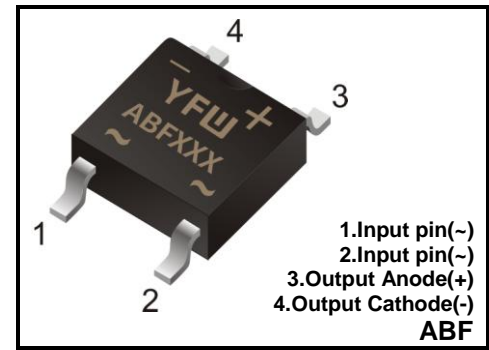
Forward Current – 1.0A

### 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.

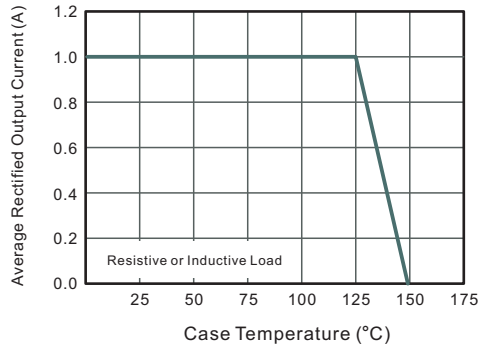
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

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						$\mu\text{A}$
Typical Junction Capacitance <sup>(Note1)</sup>	$C_j$	13						pF
Typical Thermal Resistance <sup>(Note3)</sup>	$R_{\theta JA}$ $R_{\theta JC}$	75 20						$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150						$^\circ\text{C}$

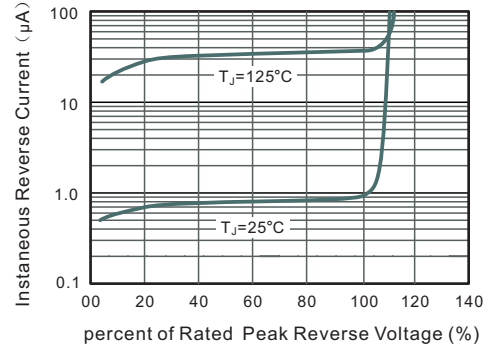
(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

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

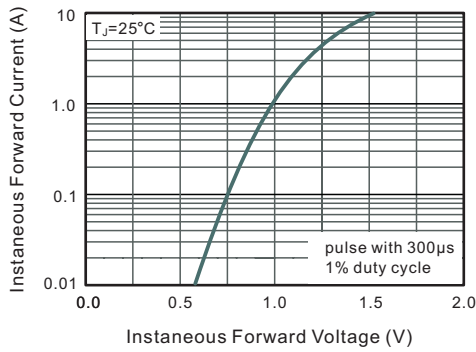
**Fig.1 Average Rectified Output Current Derating Curve**



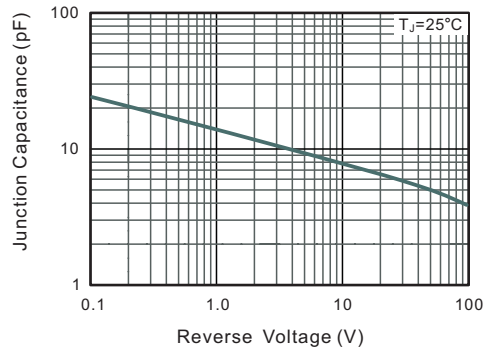
**Fig.2 Typical Reverse Characteristics**



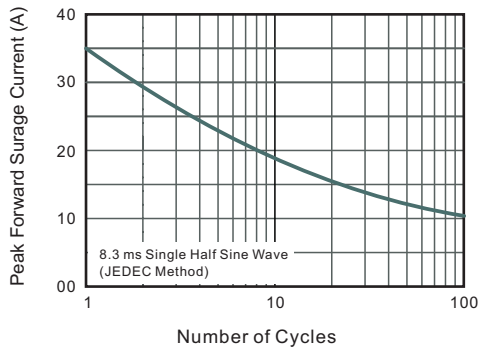
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**

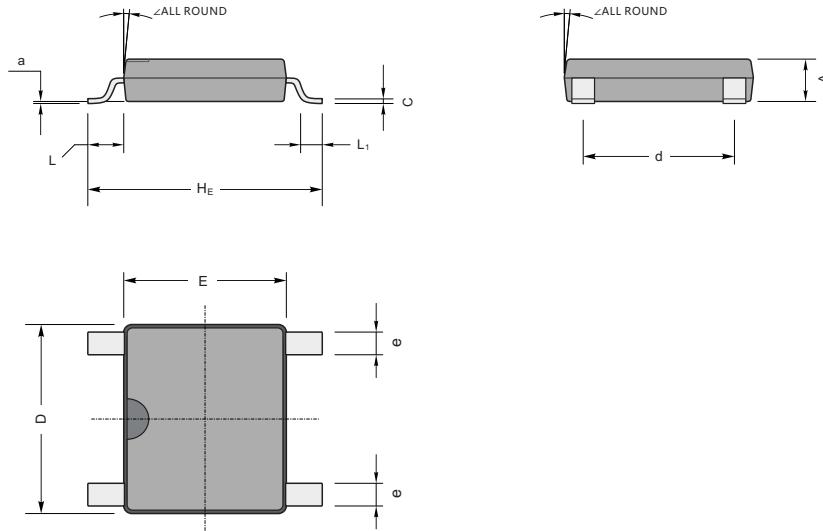


**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



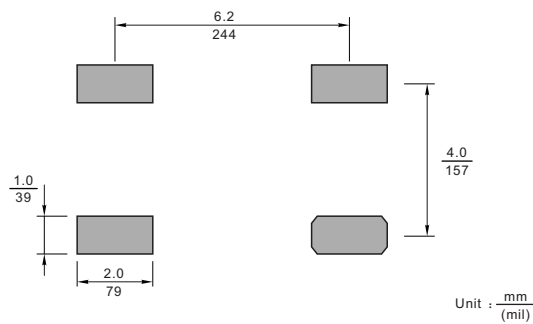
**Package Outline ABF**

Plastic surface mounted package; 4 leads



UNIT		A	C	D	E	HE	d	e	L	L <sub>1</sub>	a	∠
mm	max	1.2	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.0	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	47	8.7	205	177	252	165	28	37	24	8	
	min	39	5.9	193	166	236	150	20				

**The recommended mounting pad size**



**Summary of Packing Options**

Package	Packing Description	Packing Quantity	Industry Standard
ABF	Tape/Reel, 13" reel	5000	EIA-481-1