

2.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE

RECTIFIER Reverse Voltage - 100 to 1000 V

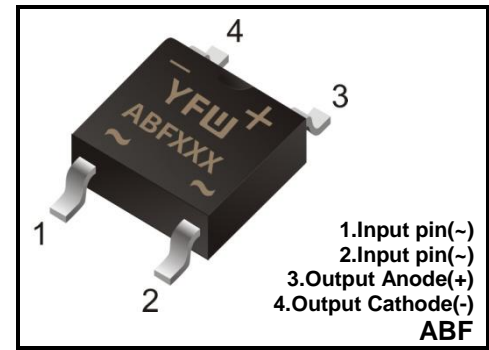
Forward Current – 2.0A

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
ABF201	ABF201
ABF202	ABF202
ABF204	ABF204
ABF206	ABF206
ABF208	ABF208
ABF210	ABF210

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	ABF201	ABF202	ABF204	ABF206	ABF208	ABF210	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 $T_c = 115\text{ }^\circ\text{C}$	I_o	2.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	60						A
Forward Voltage per element at 2.0A	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	5.0 100						μA
Typical Junction Capacitance ^(Note1)	C_j	30						pF
Typical Thermal Resistance ^(Note3)	$R_{\theta JA}$ $R_{\theta JC}$	60 16						$^\circ\text{C/W}$
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

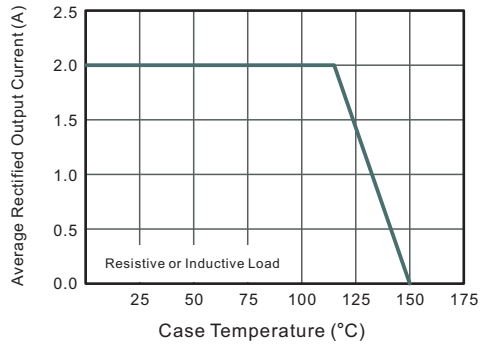


Fig.2 Typical Reverse Characteristics

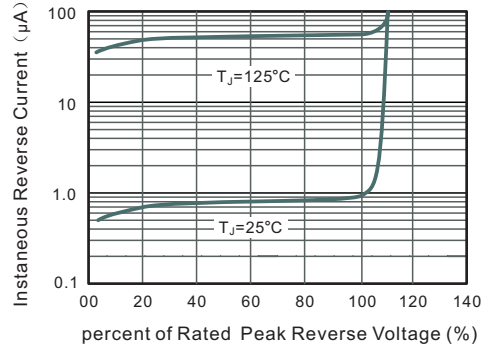


Fig.3 Typical Instantaneous Forward Characteristics

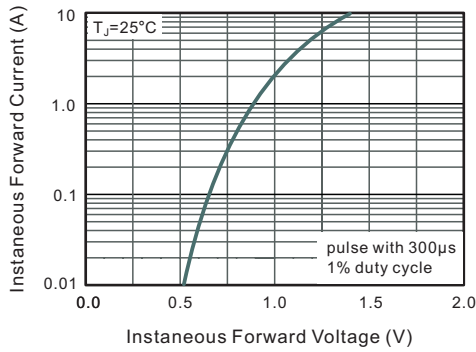


Fig.4 Typical Junction Capacitance

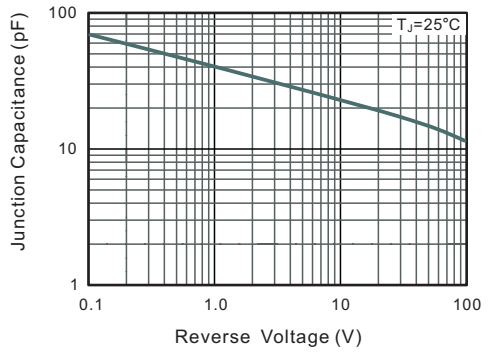
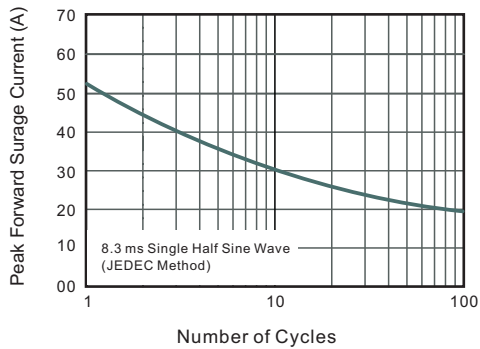
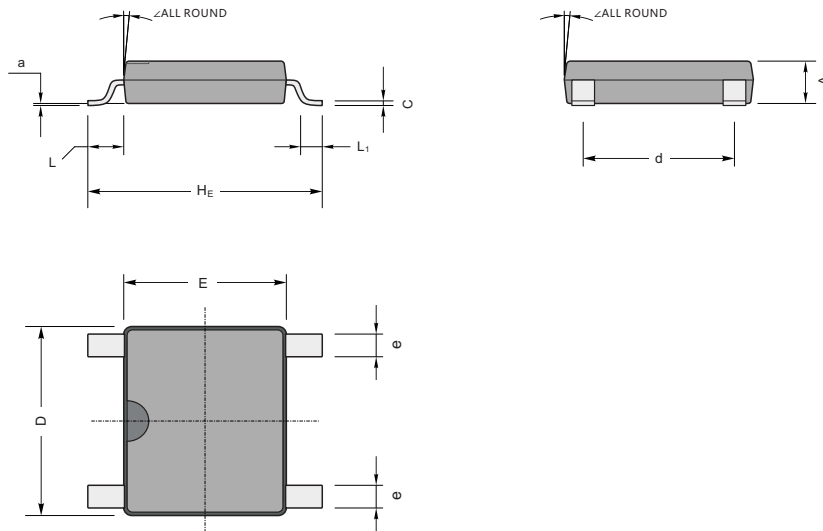


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



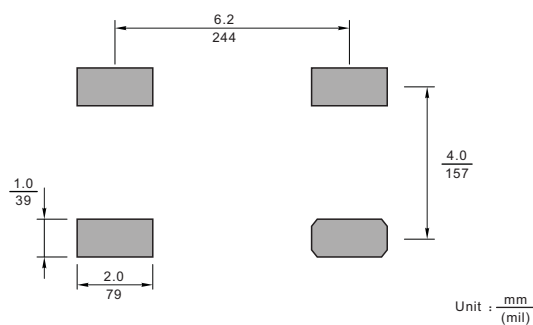
Package Outline ABF

Plastic surface mounted package; 4 leads



UNIT		A	C	D	E	H_E	d	e	L	L_1	a	\angle
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