



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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Contact us

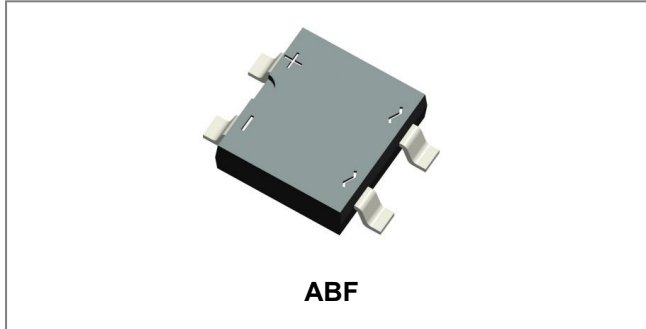
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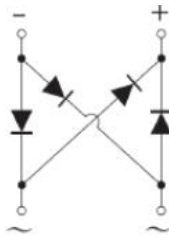
**FTB1F-15F THRU FTB10F-15F
1.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER**



Features

- Glass Passivated Chip Junction
- Reverse Voltage - 100 to 1000 V
- Forward Current - 1.5 A
- Designed for Surface Mount Application
- Fast reverse recovery time
- 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: ABF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 82 mg

Maximum Ratings @ $T_A=25^\circ\text{C}$ unless otherwise specified

Single Phase half wave 60Hz, resistive or inductive load. For capacitive load current derate by 20%.

Characteristic	Symbol	FTB1F -15F	FTB2F -15F	FTB4F -15F	FTB6F -15F	FTB8F -15F	FTB10F -15F	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Forward Output Current @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	1.5						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50						A

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

Characteristic	Symbol	FTB1F -15F	FTB2F -15F	FTB4F -15F	FTB6F -15F	FTB8F -15F	FTB10F -15F	Units
Forward voltage per element @ $I_F = 1.5\text{A}$	V_F	1.3						V
Maximum DC reverse current at rated DC blocking voltage $T_A = 25^{\circ}\text{C}$ $T_A = 125^{\circ}\text{C}$	I_R	5 100						μA
Typical Junction Capacitance (Note 1)	C_J	25						pF
Maximum Reverse Recovery Time (Note 3)	T_{rr} $T_{rr(TYP.)}$	500 300						ns

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

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

Characteristic	Symbol	FTB1F -15F	FTB2F -15F	FTB4F -15F	FTB6F -15F	FTB8F -15F	FTB10F -15F	Units
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80						$^{\circ}\text{C/W}$
Operating and storage temperature range	T_J, T_{STG}	-55 to +150						$^{\circ}\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on glass epoxy PC board with $4 \times (5 \times 5\text{mm}^2)$ copper pad.
3. Reverse Recovery Test Conditions: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $IRR=0.25\text{A}$

Ratings and Characteristics Curves

Fig.1 Average Rectified Output Current Derating Curve

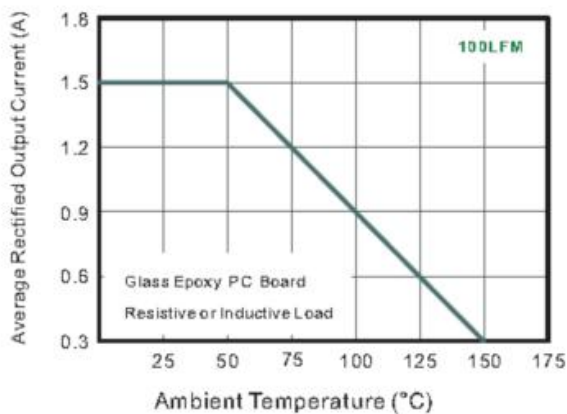


Fig.2 Typical Reverse Characteristics

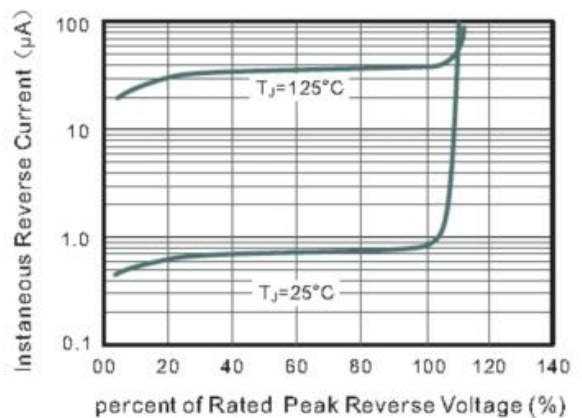


Fig.3 Typical Instantaneous Forward Characteristics

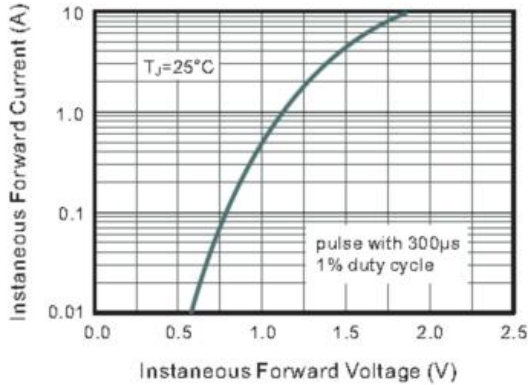


Fig.4 Typical Junction Capacitance

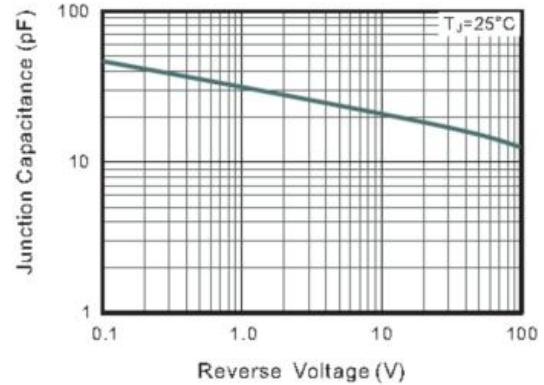
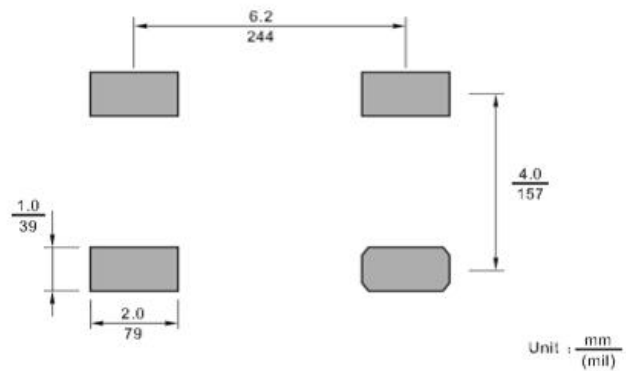
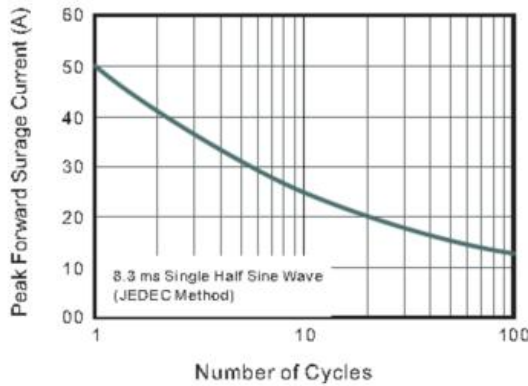


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



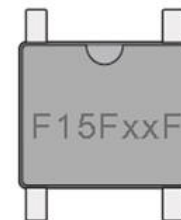
Ordering Information

Device	Package	Plating	Shipping
FTB1F-15F THRU FTB10F-15F	ABF	Pure Sn	5000pcs / reel

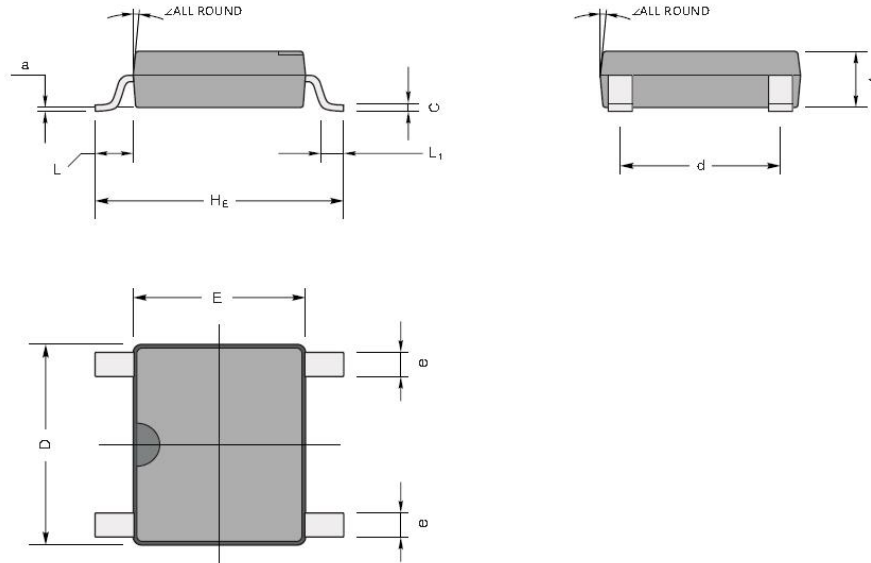
For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

Type number	Marking code
FTB1F-15F	F15F1F
FTB2F-15F	F15 F2F
FTB4F-15F	F15F4F
FTB6F-15F	F15F6F
FTB8F-15F	F15F8F
FTB10F-15F	F15F10F

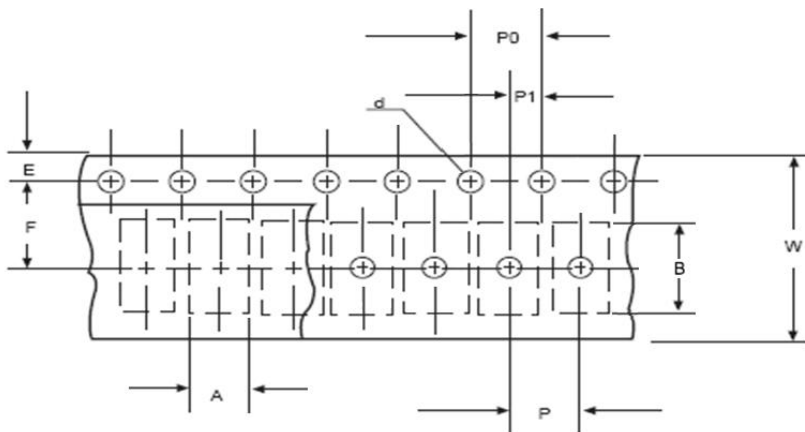


Mechanical Dimensions ABF(Inches/Millimeters)



UNIT		A	C	D	E	H _E	d	e	L	L ₁	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	4	
	min	39	5.9	193	166	236	150	20				

Carrier Tape 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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