

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

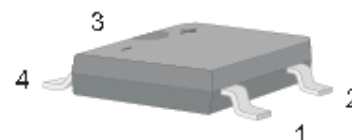
**Features:**

- 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

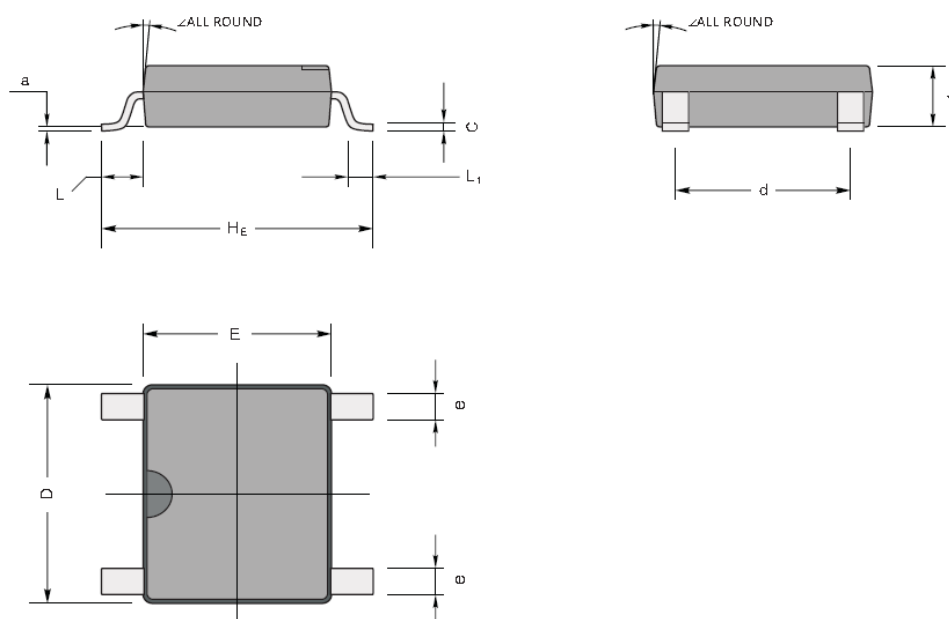
PIN	DESCRIPTION
1	Input Pin (~)
2	Input Pin (~)
3	Output Anode (+)
4	Output Cathode (-)

**Mechanical Data:**

- Case: ABF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 82 mg



**Mechanical Dimensions: In mm/mil**

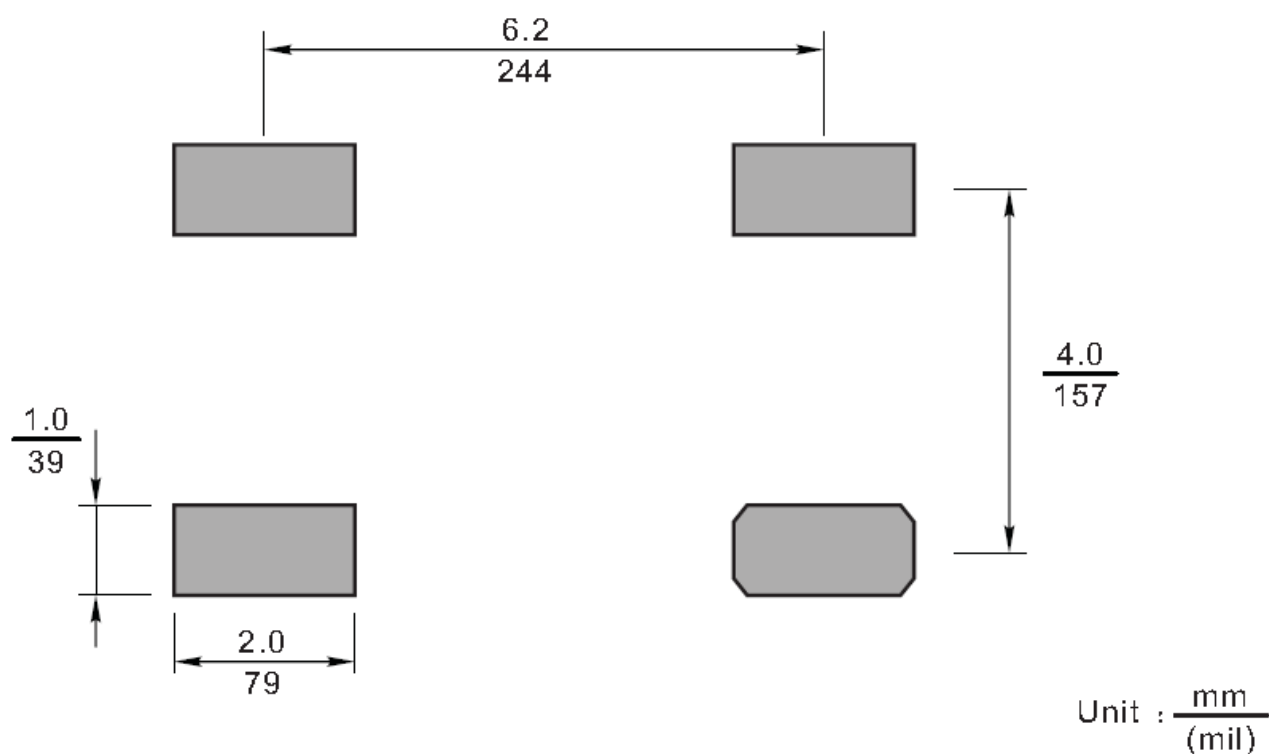


UNIT		A	C	D	E	H <sub>E</sub>	d	e	L	L <sub>1</sub>	a	∠
mm	max	1.2	0.22	5.2	4.5	6.4	4.2	0.7	0.95	0.6	0.2	7°
	min	1.0	0.15	4.9	4.2	6.0	3.8	0.5				
mil	max	47	8.7	205	177	252	165	28	37	24	4	
	min	39	5.9	193	166	236	150	20				

**ABF**

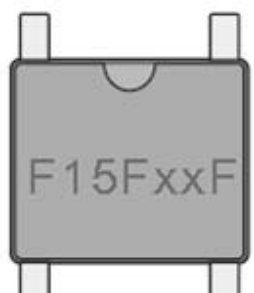
- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - [sales@smc-diodes.com](mailto:sales@smc-diodes.com) •

The recommended mounting pad size:



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



**FTB1F-15F  
THRU  
FTB10F-15F**

**Technical Data**  
Data Sheet N1743, Rev. -

**Green Products**

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

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

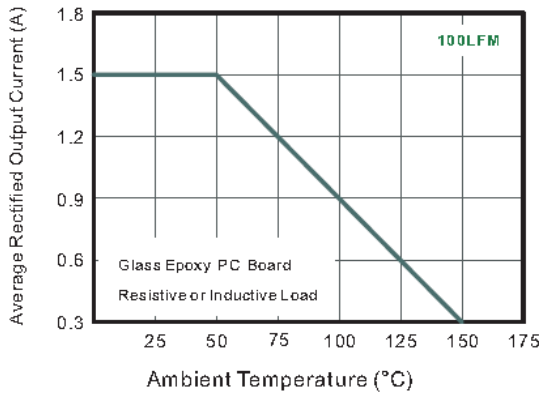
Characteristic	Symbol	FTB1F -15F	FTB2F -15F	FTB4F -15F	FTB6F -15F	FTB8F -15F	FTB10F -15F	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	100	200	400	600	800	1000	V
Average Rectified Output Current at $T_A=50^\circ\text{C}$	$I_o$	1.5						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50						A
Maximum instantaneous forward voltage at 1.5A	$V_F$	1.3						V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	$I_R$	5.0 100						$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	25						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80						$^\circ\text{C}/\text{W}$
Maximum Reverse Recovery Time (Note 3)	$T_{rr}$ $T_{rr(TYP.)}$	500 300						ns
Junction Temperature	$T_J$	-55 to +150						$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150						$^\circ\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

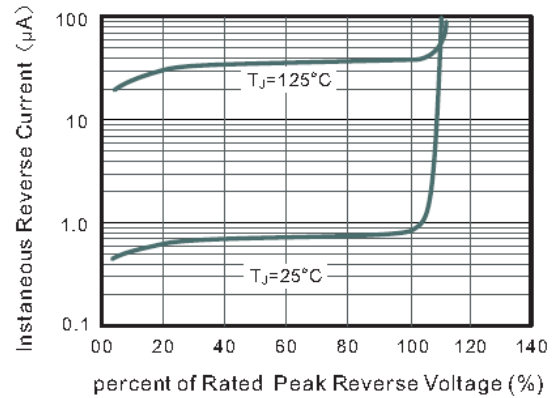
2. Mounted on glass epoxy PC board with  $4 \times (5 \times 5\text{mm}^2)$  copper pad.

3. Reverse Recovery Test Conditions:  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $IRR=0.25\text{A}$

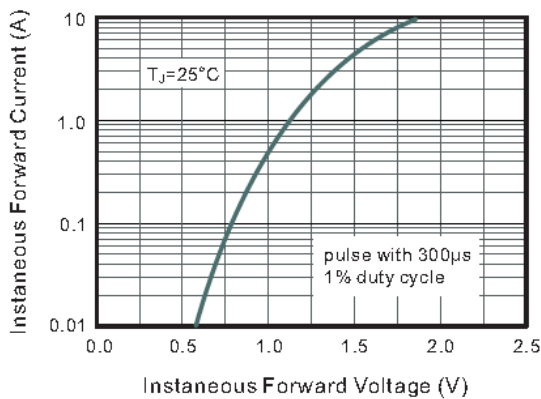
**Fig.1 Average Rectified Output Current Derating Curve**



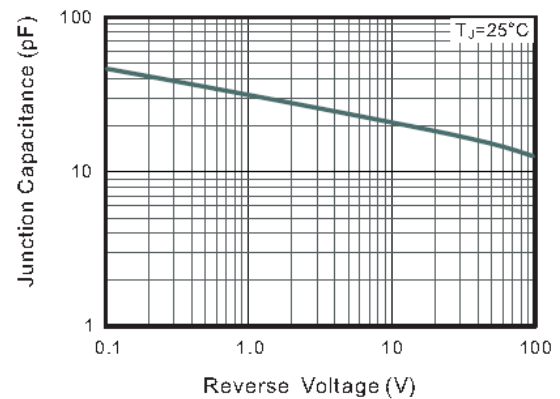
**Fig.2 Typical Reverse Characteristics**



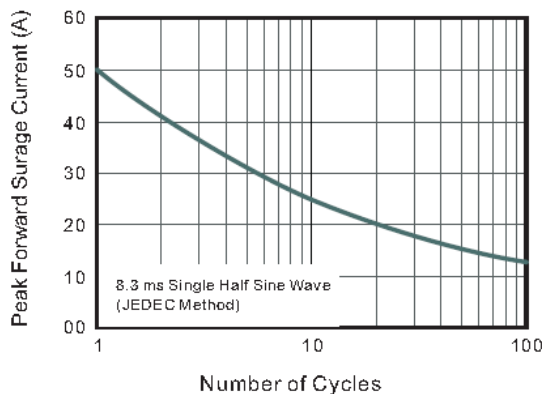
**Fig.3 Typical Instantaneous Forward Characteristics**



**Fig.4 Typical Junction Capacitance**



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





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