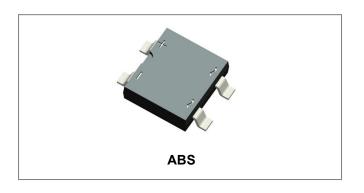


# FTB6F-15FP THRU FTB10F-15FP

Technical Data Data Sheet N1814, Rev. A

# RoHS HF

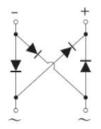
# FTB6F-15FP THRU FTB10F-15FP 1.5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER



# Features

- Glass Passivated Chip Junction
- Reverse Voltage 600 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: ABS
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 88 mg

### Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	FTB6F -15FP	FTB8F -15FP	FTB10F -15FP	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	600	800	1000	V
RMS Reverse Voltage	VRMS	420	560	700	V
Average Forward Output Current @ T <sub>A</sub> =75°C	IF(AV)		1.5		Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50		A	

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# FTB6F-15FP THRU FTB10F-15FP

RoHS HF

### Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	FTB6F -15FP	FTB8F -15FP	FTB10F -15FP	Units
Forward voltage per element $@ I_F = 1.5A$	VF		1.3		V
Maximum DC reverse current $T_A = 25^{\circ}C$ at rated DC blocking voltage $T_A = 125^{\circ}C$	I <sub>R</sub>		5 50		μA
Typical Junction Capacitance (Note 1)	CJ		35		pF
Maximum Reverse Recovery Time (Note 3)	Trr		160		ns

\* Pulse width < 300  $\mu$ s, duty cycle < 2%

### Thermal-Mechanical Specifications @TA=25°C unless otherwise specified

Characteristic	Symbol	FTB6F -15FP	FTB8F -15FP	FTB10F -15FP	Units
Typical Thermal Resistance (Note 2)	R <sub>0JA</sub>	75		°C/W	
Operating and storage temperature range	T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150		°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: IF=0.5A, IR=1.0A, IRR=0.25A

### **Ratings and Characteristics Curves**

#### Fig.1 Forward Current Derating Curve

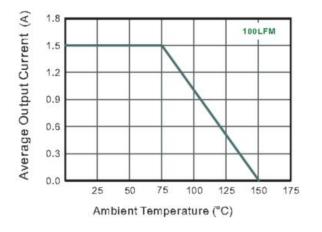
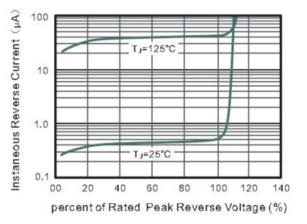


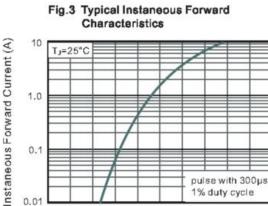
Fig.2 Typical Reverse Characteristics

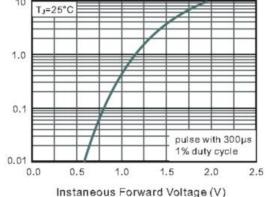


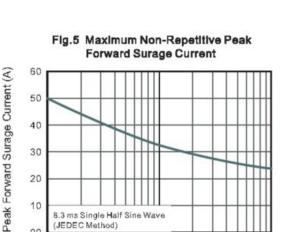




#### RoHS HF







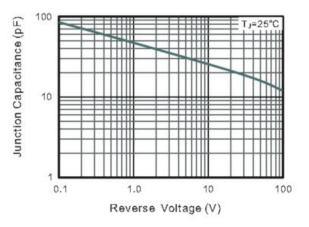
20 10 8.3 ms Single Half Sine Wave (JEDEC Method) 00 10 Number of Cycles

### **Ordering Information**

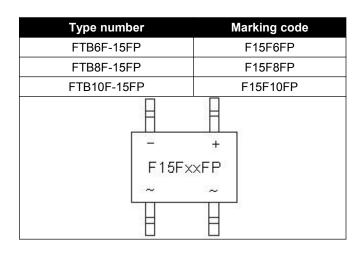
Device	Package	Plating	Shipping
FTB6F-15FP THRU FTB10F-15FP	ABS	Pure Sn	5000pcs / reel

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

#### Fig.4 Typical Junction Capacitance



# **Marking Diagram**

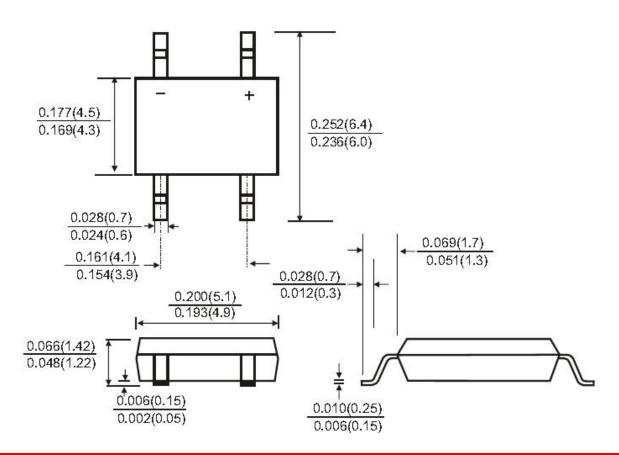


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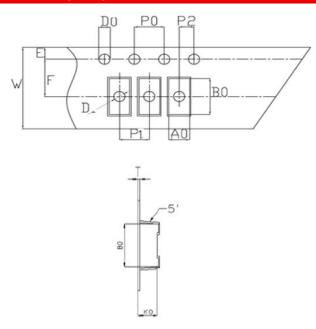
100



Mechanical Dimensions ABS(Inches/Millimeters)



### **Carrier Tape Specification ABS**



SYMBOL	Millimeters			
STWBOL	Min.	Max.		
A0	5.21	5.41		
B0	7.10	7.30		
D0	1.50	1.60		
D1	1.40	1.60		
P0	3.90	4.10		
P1	7.90	8.10		
P2	1.95	2.05		
Е	1.65	1.85		
K0	1.55	1.75		
F	5.45	5.55		
W	11.90	12.10		
Т	0.24	0.30		
10P0	39.80	40.20		

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## FTB6F-15FP THRU FTB10F-15FP

RoHS HF





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