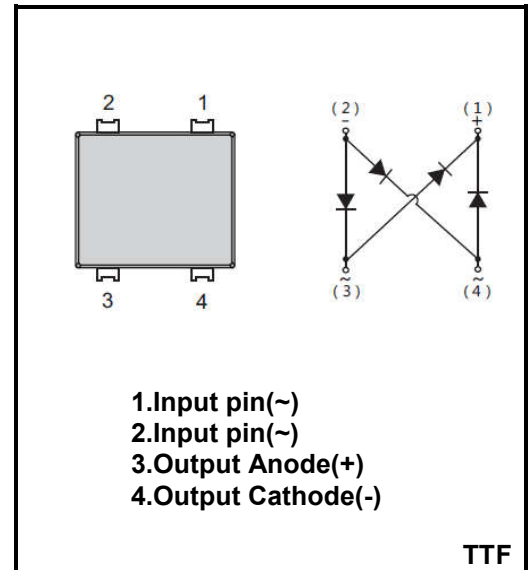


**8.0A Super Fast Recovery Rectifier Bridge**
**Reverse Voltage - 300 to 600 V**  
**Forward Current – 8.0A**
**FEATURES**

- ◆High current capability
- ◆Low forward voltage drop
- ◆Glass Passivated Chip Junction
- ◆Designed for Surface Mount Application
- ◆Lead free in comply with EU RoHS 2011/65/EU directives

**MECHANICAL DATA**

- ◆Case:TTF
- ◆Terminals: Solderable per MIL-STD-750, Method 2026
- ◆Approx. Weight: 0.461g / 0.0163oz


**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 %**

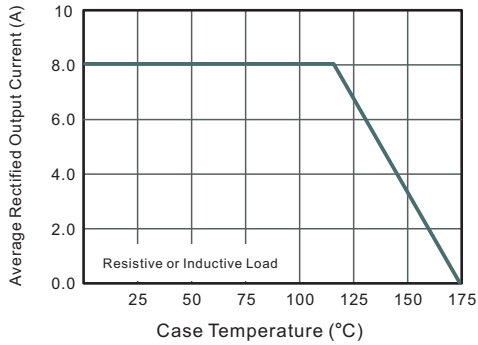
Parameter	Symbols	TTF803E	TTF806E	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	300	600	V
Maximum RMS voltage	$V_{RMS}$	200	420	V
Maximum DC Blocking Voltage	$V_{DC}$	300	600	V
Average Rectified Output Current	$I_{(AV)}$	8.0		A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	220		A
Peak Forward Surge Current 1.0 ms Single Half Sine-Wave Superimposed on Rated Load	$I_{FSM}$	350		A
Forward Voltage per element @ $I_F=8A$ DC	$V_F$	1.20	1.50	V
Maximum Reverse Recovery Time	$T_{rr}$	35		nS
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_a=25^{\circ}C$	5		$\mu A$
	@ $T_a=125^{\circ}C$	500		
$I^2t$ Rating for Fusing( $3ms \leq t \leq 8.3ms$ )	$I^2t$	200		$A^2S$
Typical Junction Capacitance	$C_j$	100		pF
Typical Thermal Resistance	$R_{\theta JA}$	60		$^{\circ}C/W$
	$R_{\theta JC}$	10		
	$R_{\theta JL}$	12		
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +175		$^{\circ}C$

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

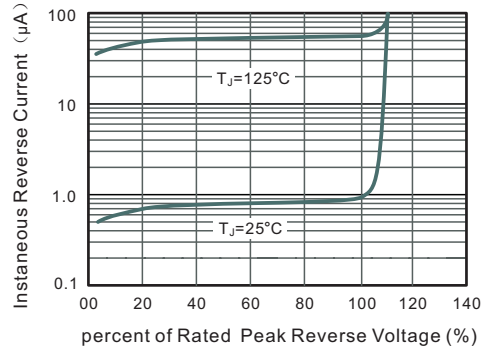
(2) Mounted on glass epoxy PC board with 4×1.5"×1.5" (3.81×3.81 cm) copper pad.

**Ratings and Characteristic Curves**

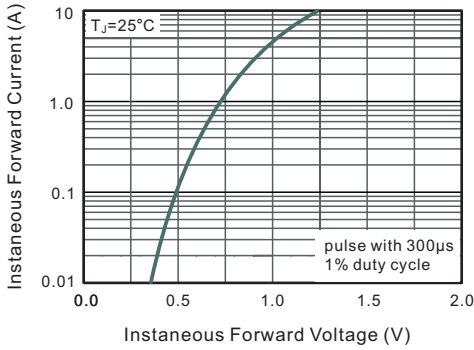
**Fig.1 Average Rectified Output Current Derating Curve**



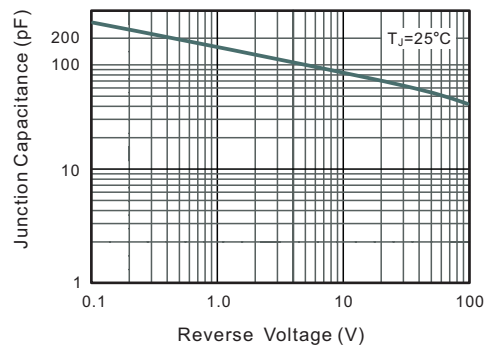
**Fig.2 Typical Reverse Characteristics**



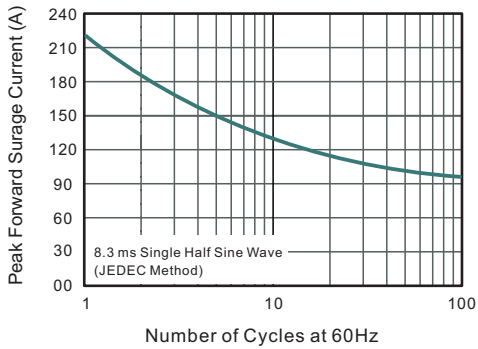
**Fig.3 Typical Instantaneous Forward Characteristics**



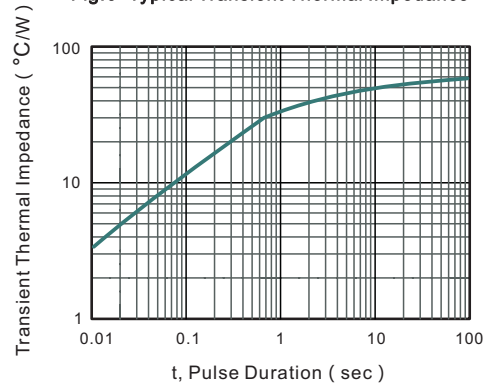
**Fig.4 Typical Junction Capacitance**



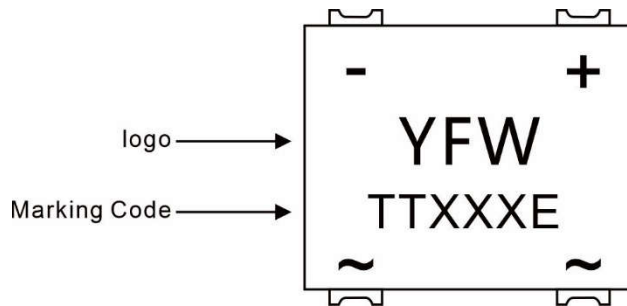
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.6- Typical Transient Thermal Impedance**



Marking Diagram



Ordering information

Package	Packing Description	Packing Quantity
TTF	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

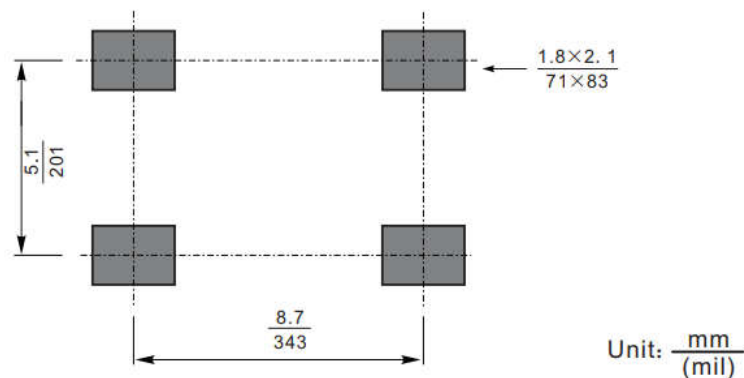
Package Dimensions

TTF

Dim.	Millimeter(mm)		(mil)	
	Min.	Max.	Min.	Max.
A	1.35	1.75	53	68
C	0.25	0.55	9.8	21.6
D	9.4	9.8	370	385
E	8.4	8.8	330	346
E <sub>1</sub>	9.8	10.2	385	401
L	0.85	1.25	33	49
e	4.9	5.3	193	209
b	1.25	1.55	49	61
∠	10°			

The mechanical drawing shows the package from top, side, and lead detail views. Dimensions A, C, D, E, E<sub>1</sub>, L, e, and b are labeled. The lead detail shows a rounded profile with 'ALL ROUND' and a symbol for lead angle.

The recommended mounting pad size



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