

Super Fast Recovery Rectifier Bridge

Reverse Voltage - 300 to 600 V

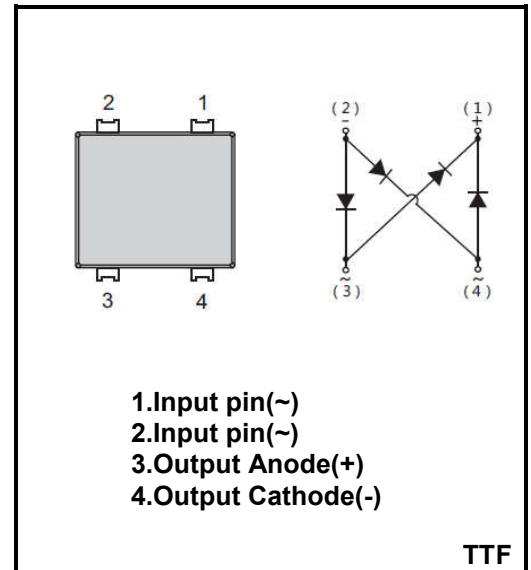
Forward Current – 8.0A

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	1.0	1.30	V
Maximum Reverse Recovery Time		T_{rr}	75		nS
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_a=25^{\circ}C$	I_R	5		μA
	@ $T_a=125^{\circ}C$		500		
I2t Rating for Fusing($3ms \leq t \leq 8.3ms$)		I^2t	200		A ² S
Typical Junction Capacitance		C_j	100		pF
Typical Thermal Resistance		$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		°C/W
Operating and Storage Temperature Range		T_j, T_{stg}	-55 ~ +175		°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

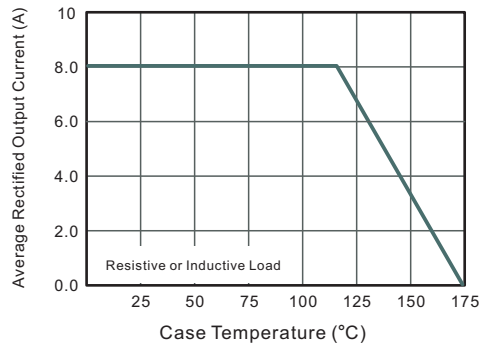


Fig.2 Typical Reverse Characteristics

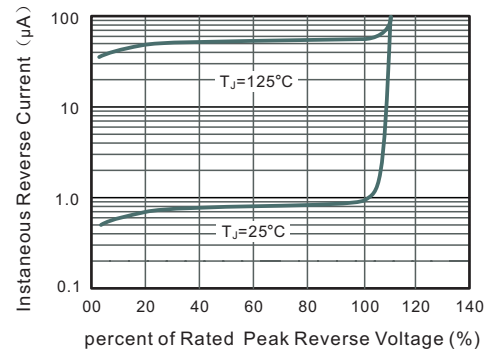


Fig.3 Typical Instantaneous Forward Characteristics

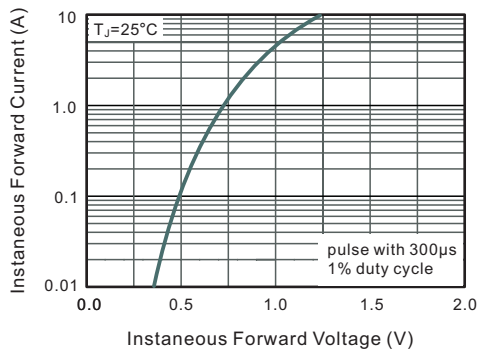


Fig.4 Typical Junction Capacitance

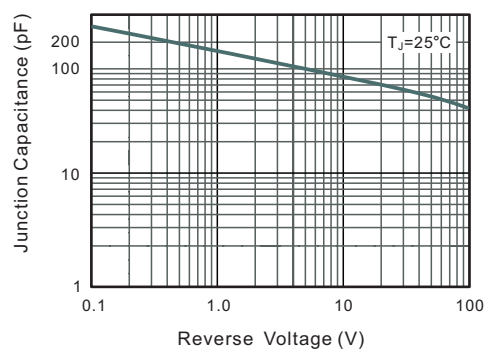


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

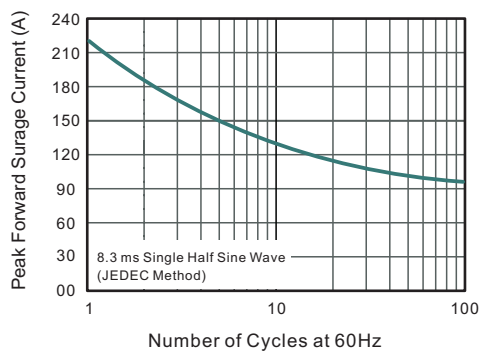
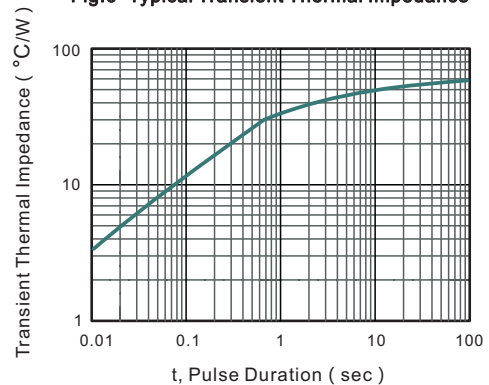
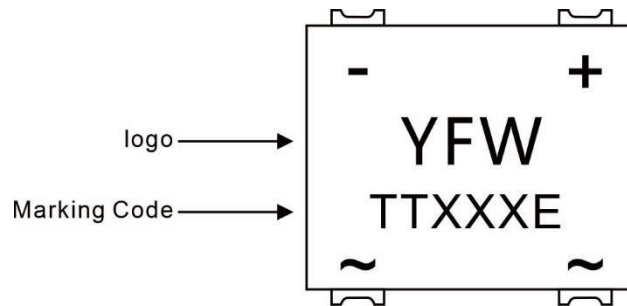


Fig.6- Typical Transient Thermal Impedance



Marking Diagram



Ordering information

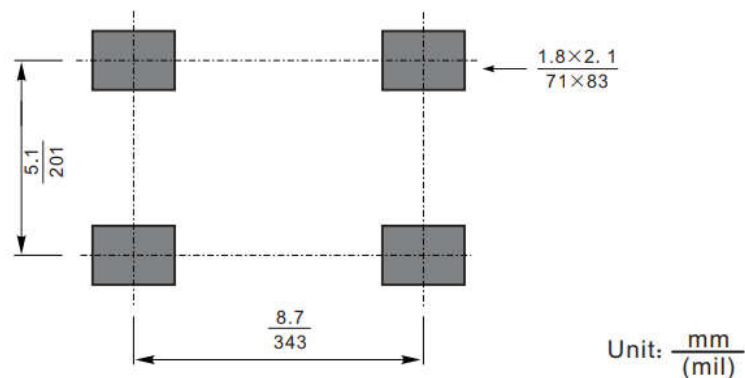
Package	Packing Description	Packing Quantity
TTF	Tape/Reel, 13" reel	3000PCS/Reel 30000PCS/Carton

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 ₁	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 recommended mounting pad size



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