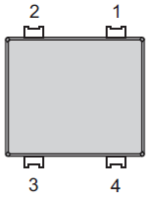
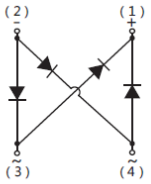
5A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER Reverse Voltage - 100 to 1000 V

Forward Current – 5.0A





1.Output Anode(+)
2.Output Cathode(-)
3.Input pin(~)
4.Input pin(~)

TTF

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

Marking Code	
TT501F	TT501F
TT502F	TT502F
TT504F	TT504F
TT506F	TT506F
TT508F	TT508F
TT510F	TT510F

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	TT501F	TT502F	TT504F	TT506F	TT508F	TT510F	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	I_o	5.0						A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	180						A
I2t Rating for Fusing	I^2t	134						A^2S
Forward Voltage per element at 1.0A	V_F	0.83(TYP)						V
Forward Voltage per element at 5.0A	V_F	1.0						V
Maximum DC Reverse Current @T_A=25°C at Rated DC Blocking Voltage @T_A=125°C	I_R	5 100						μA
Typical Junction Capacitance (Note1)	C_j	60						pF
Typical Thermal Resistance (Note2)	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12						°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150						°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.

Fig.1 Average Rectified Output Current Derating Curve

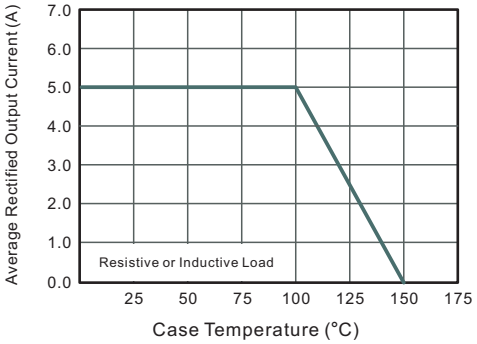


Fig.2 Typical Reverse Characteristics

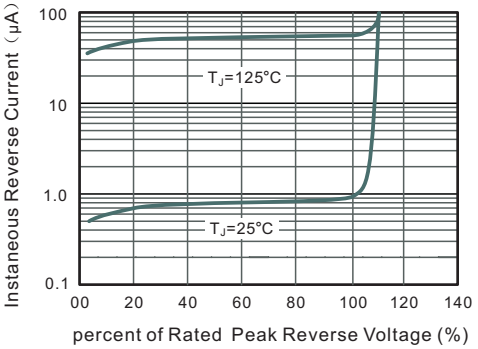


Fig.3 Typical Instaneous Forward Characteristics

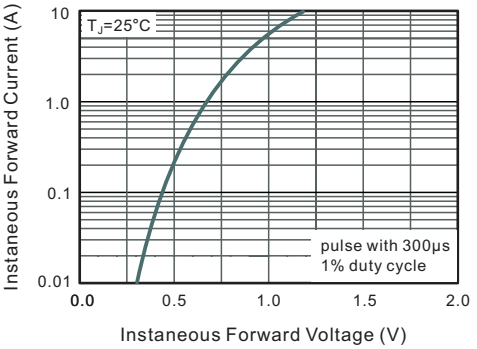


Fig.4 Typical Junction Capacitance

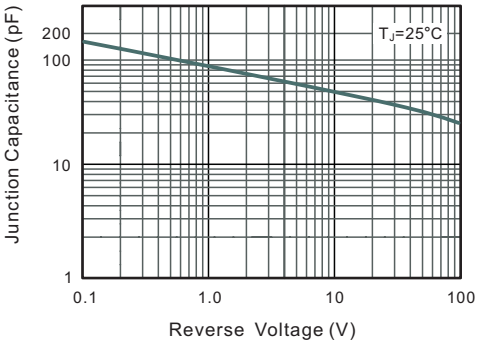


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

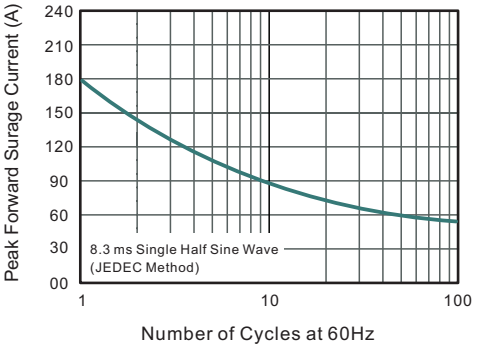
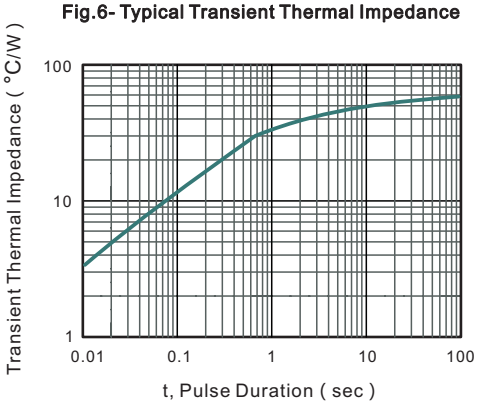
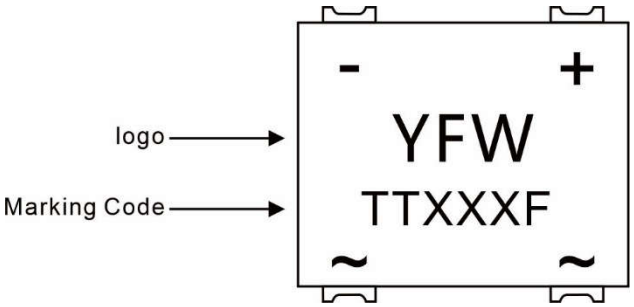


Fig.6- Typical Transient Thermal Impedance



Marking Diagram

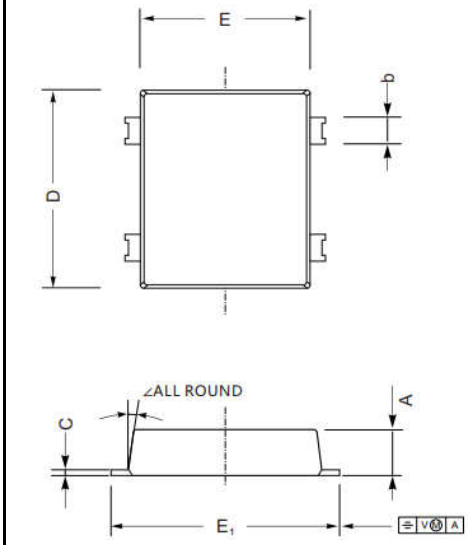


Ordering information

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

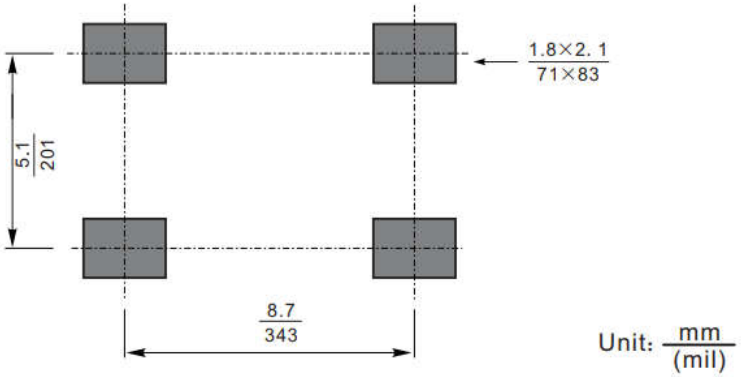
Package Dimensions

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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