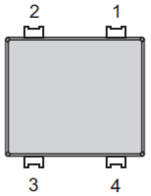
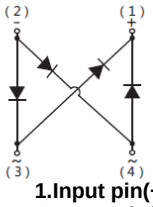
6A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER Reverse Voltage - 100 to 1000 V Forward Current – 6.0A





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

TTF

Marking Code	
TTR610F	TTR610F

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	TTR610F	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Average Rectified Output Current at T_c=100℃	I_o	6.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC method)	I_{FSM}	200	A
I2t Rating for Fusing	I^2t	166	A^2S
Typical Thermal Resistance（Note1）	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 6 14	°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150	°C

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

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	Test Conditions	Typ	Max	Units
Instantaneous forward voltage	V_F	I =6A TJ=25℃	-	1.0	V
Reverse current at DC blocking voltage	I_R	TJ=25℃ TJ=125℃	-	1 200	uA
Maximum Reverse Recovery Time	Trr	Measured with I_F=0.5A, I_R=1A, Irr = 0.25 A .	-	500	nS
Typical Junction Capacitance	Cj	f=1MHz,VR=4V DC TJ= 25℃	80	-	pF

Fig.1 Average Rectified Output Current Derating Curve

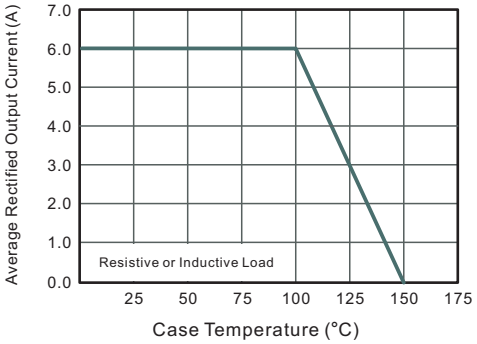


Fig.2 Typical Reverse Characteristics

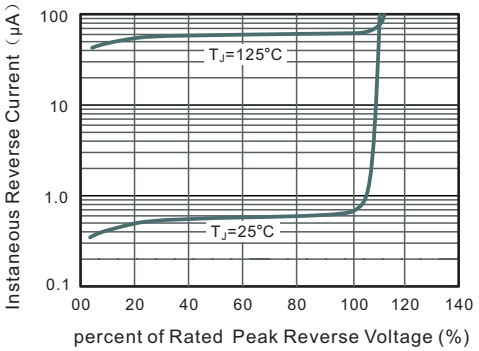


Fig.3 Typical Instaneous Forward Characteristics

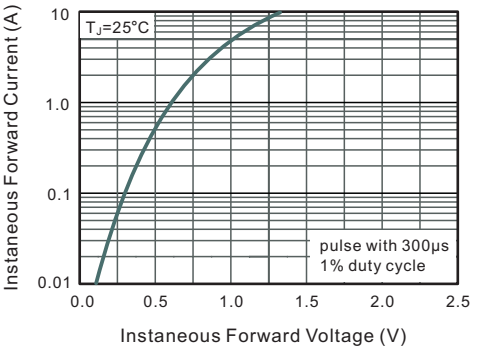


Fig.4 Typical Junction Capacitance

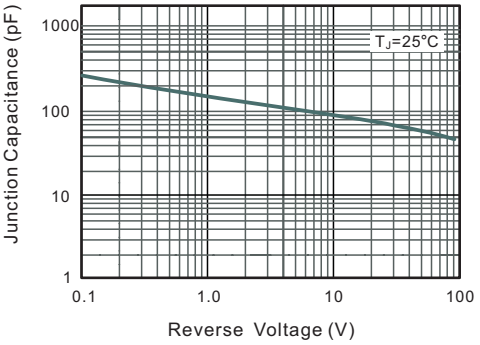


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

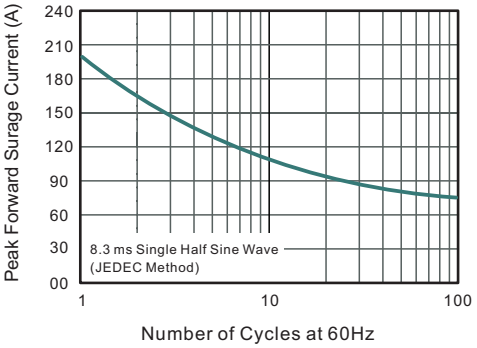
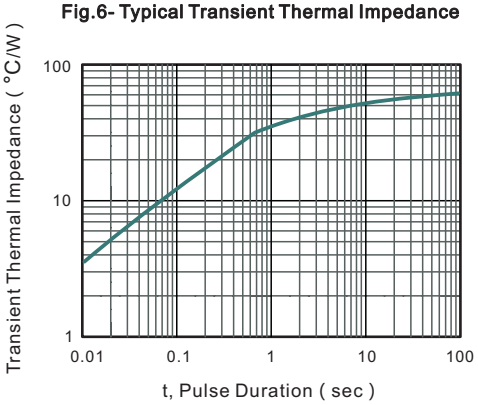
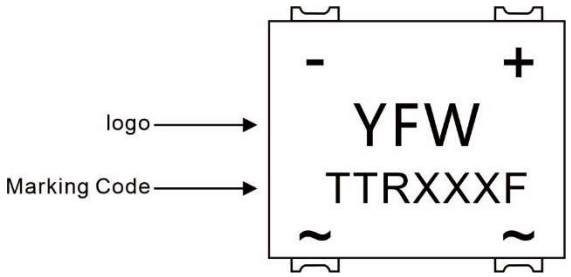


Fig.6- Typical Transient Thermal Impedance



Marking Diagram

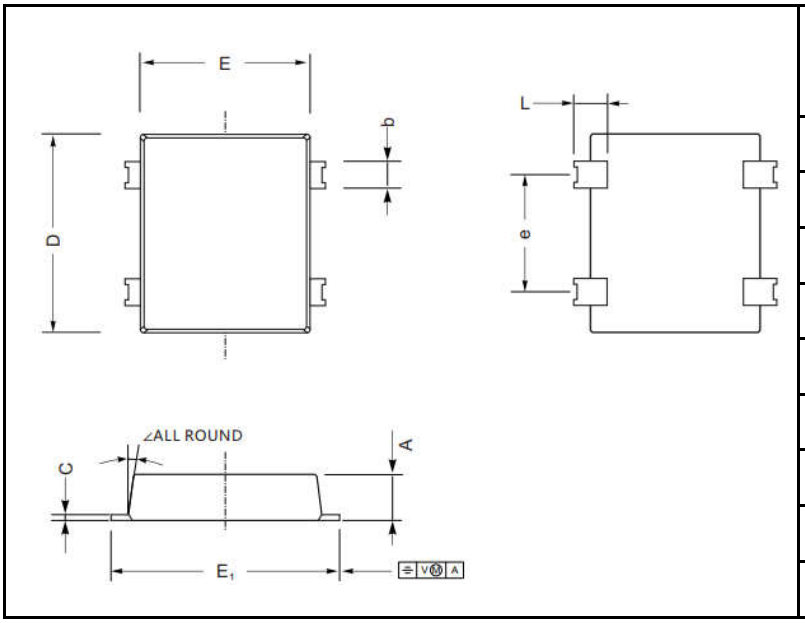


Ordering information

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

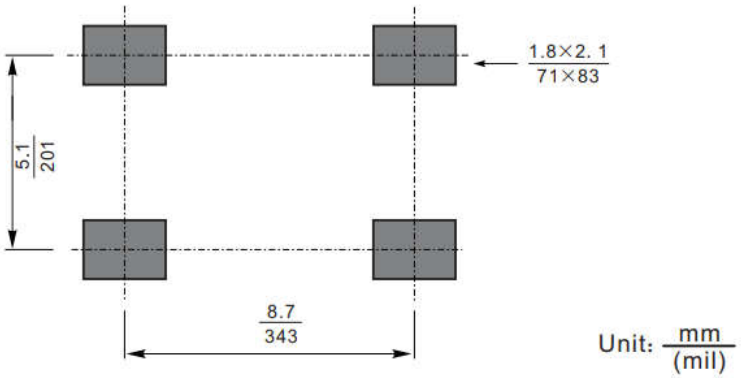
Package Dimensions

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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