



# TT6KF THRU TT6MF

Voltage Range - 800 to 1000 Volts Current - 6.0 Ampere

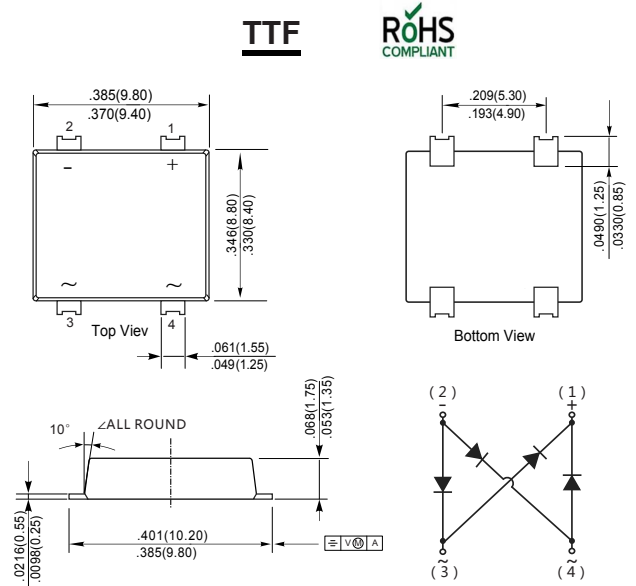
## GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

### Features

- ◆ Glass Passivated Chip Junction
- ◆ Reverse Voltage - 800 to 1000 V
- ◆ Forward Current- 6.0 A
- ◆ High Surge Current Capability
- ◆ Designed for Surface Mount Application

### Mechanical Data

Case: JEDEC TTF molded plastic body  
 Terminals: Solderable per MIL-STD-750, Method 2026A  
 Polarity: Polarity symbol marking on body Mounting  
 Position: Any  
 Weight : 0.0163 ounce, 0.461 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	Symbols	MDD TT6KF	MDD TT6MF	Units
Marking Code				
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	800	1000	V
Maximum RMS voltage	$V_{RMS}$	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	800	1000	V
Maximum Average Forward Rectified Current	$I_O$	6		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	200		A
$I^2t$ Rating for Fusing	$I^2t$	166		A <sup>2</sup> S
Maximum Forward Voltage at 1.0 A	$V_F$	0.83 typ.		V
Maximum Forward Voltage at 6.0 A	$V_F$	1.0		V
Maximum DC Reverse Current @ $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_a=125^\circ\text{C}$	$I_R$	5 100		$\mu\text{A}$
Typical Junction Capacitance (Note1)	$C_j$	60		pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$	60		$^\circ\text{C/W}$
	$R_{\theta JC}$	10		
	$R_{\theta JL}$	12		
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. P.C.B. mounted with 4x1.5"x1.5" ( 3.81x3.81 cm ) copper pad areas.

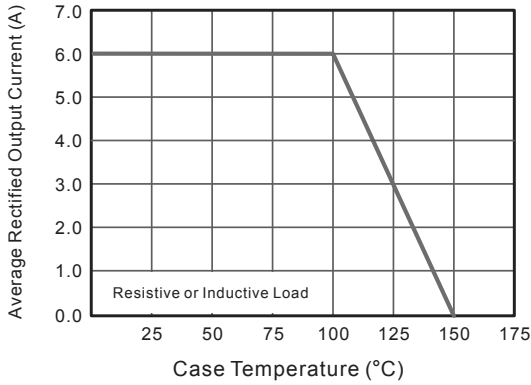


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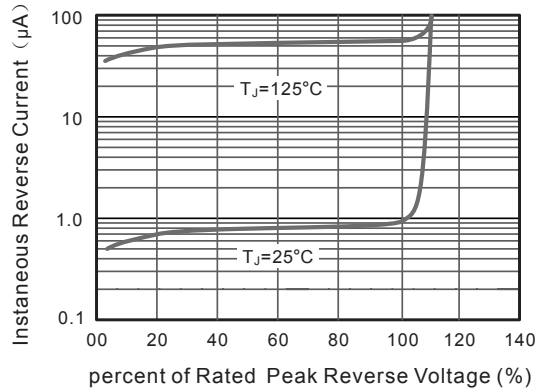
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## Typical Characteristics

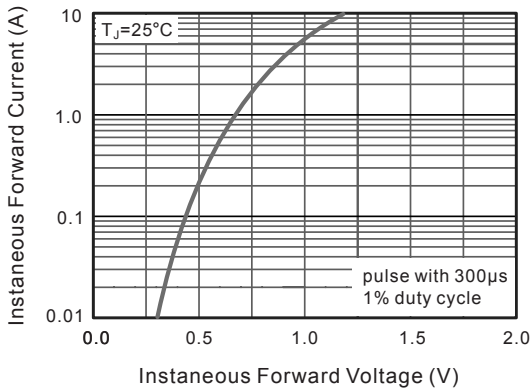
**Fig.1 Average Rectified Output Current Derating Curve**



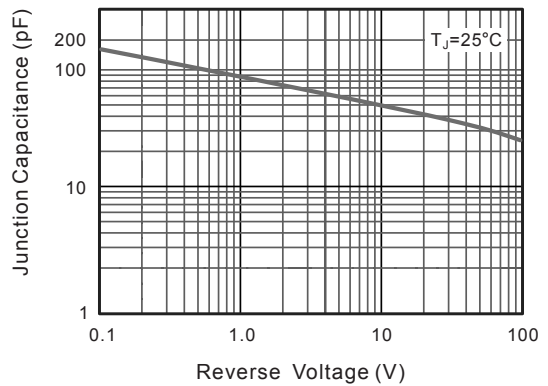
**Fig.2 Typical Reverse Characteristics**



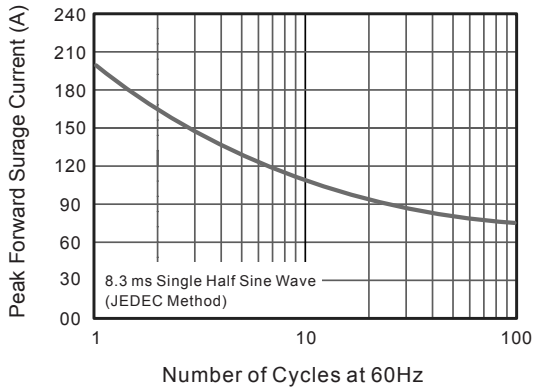
**Fig.3 Typical Instantaneous Forward Characteristics**



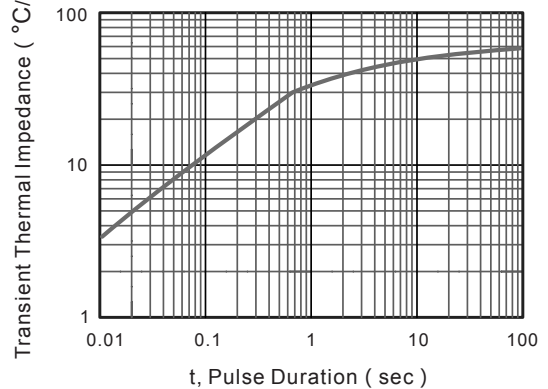
**Fig.4 Typical Junction Capacitance**



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



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



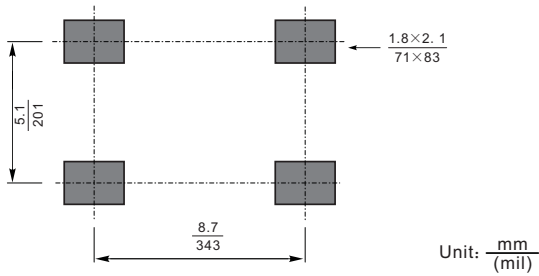
The curve above is for reference only.



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## Suggested Pad Layout



### Note:

1. Controlling dimension: in/millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.