



# TT4KF THRU TT4MF

Voltage Range - 800 to 1000 Volts Current - 4.0 Ampere

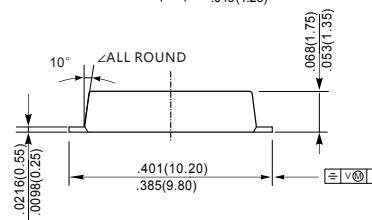
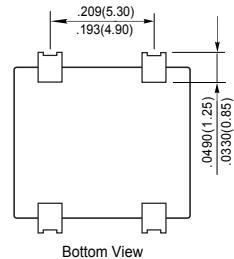
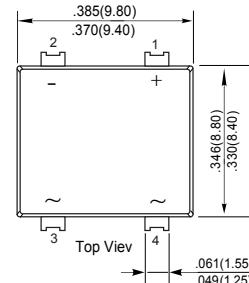
## GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

### Features

- ◆ Glass Passivated Chip Junction
- ◆ Reverse Voltage - 800 to 1000 V
- ◆ Forward Current- 4.0 A
- ◆ High Surge Current Capability
- ◆ Designed for Surface Mount Application

**TTF**

**RoHS**  
COMPLIANT



Dimensions in inches and (millimeters)

### 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

### 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 TT4KF	MDD TT4MF	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	$I_O$	4		A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	$I_{FSM}$	150		A
$I^2t$ Rating for Fusing	$I^2t$	93		$A^2S$
Maximum Forward Voltage at 1.0 A	$V_F$	0.83 typ.		V
Maximum Forward Voltage at 4.0 A	$V_F$	1.0		V
Maximum DC Reverse Current @ $T_a=25^\circ C$ at Rated DC Blocking Voltage @ $T_a=125^\circ C$	$I_R$	5 100		$\mu A$
Typical Junction Capacitance (Note1)	$C_j$	40		pF
Typical Thermal Resistance ( Note2 )	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$	60 10 12		$^\circ C/W$
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150		$^\circ C$

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

2. P.C.B. mounted with  $4 \times 1.5'' \times 1.5''$  ( 3.81x3.81 cm ) copper pad areas.



## Typical Characteristics

Fig.1 Average Rectified Output Current Derating Curve

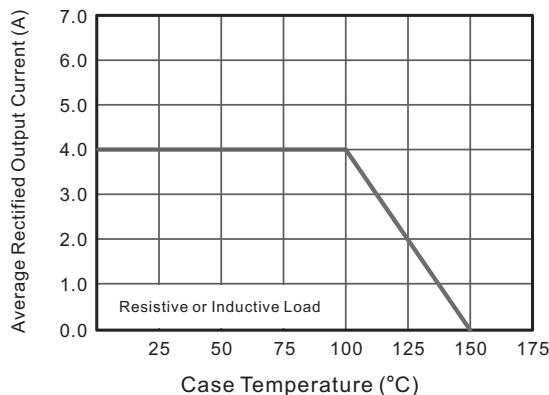


Fig.2 Typical Reverse Characteristics

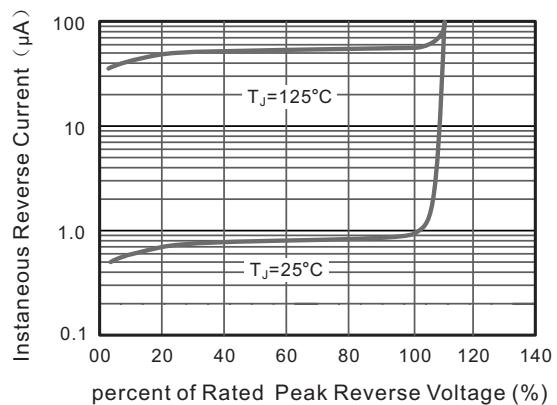


Fig.3 Typical Instantaneous Forward Characteristics

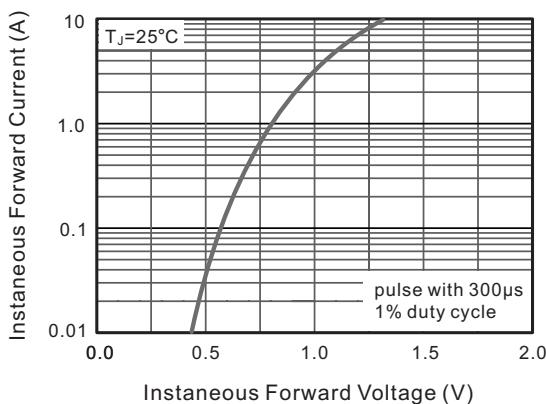


Fig.4 Typical Junction Capacitance

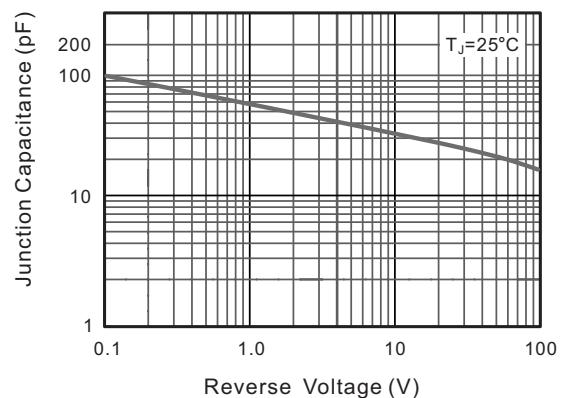


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

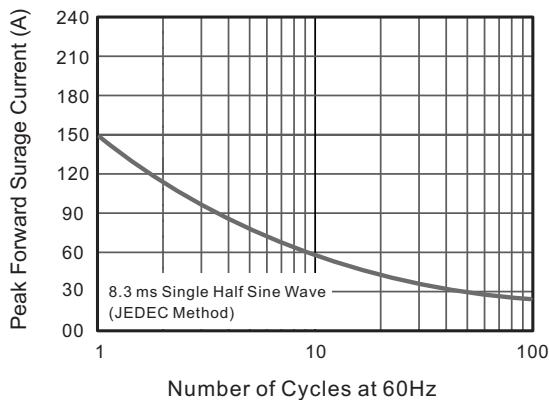
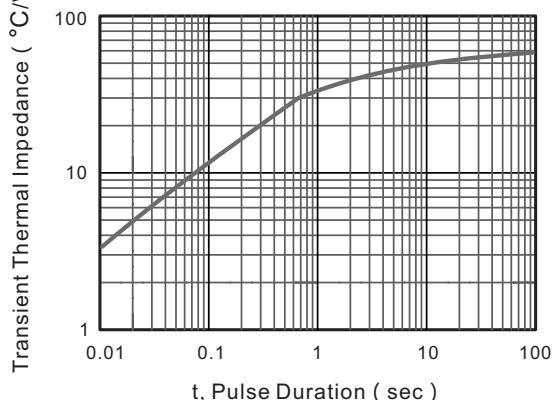


Fig.6- Typical Transient Thermal Impedance



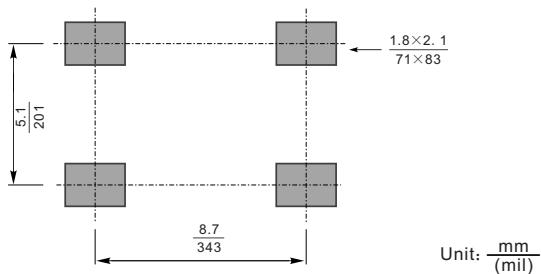
The curve above is for reference only.



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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.

Unit:  $\frac{\text{mm}}{(\text{mil})}$