



TT8KF THRU TT8MF

Voltage Range - 800 to 1000 Volts Current - 8.0 Ampere

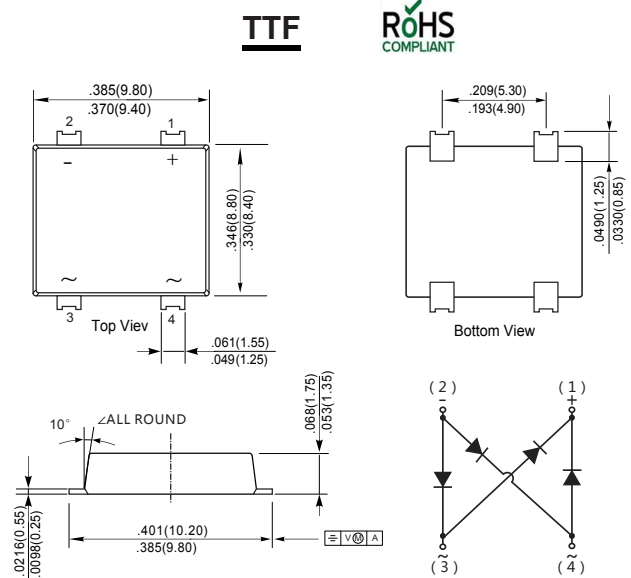
8A SURFACE MOUNT BRIDGE RECTIFIERS

Features

- ◆ Reverse Voltage - 800 to 1000 V
- ◆ Forward Current- 8.0 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 2026
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	TT8KF	TT8MF	Units
Marking Code		MDD TT8KF	MDD TT8MF	
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	8		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 1.0ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	350		A
I^2t Rating for Fusing $1ms \leq t < 8.3ms$	I^2t	200		A ² S
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		μA
Typical Junction Capacitance (Note1)	C_j	100		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 4×1.5"×1.5" (3.81×3.81 cm) copper pad areas.



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Typical Characteristics

Fig.1 Average Rectified Output Current Derating Curve

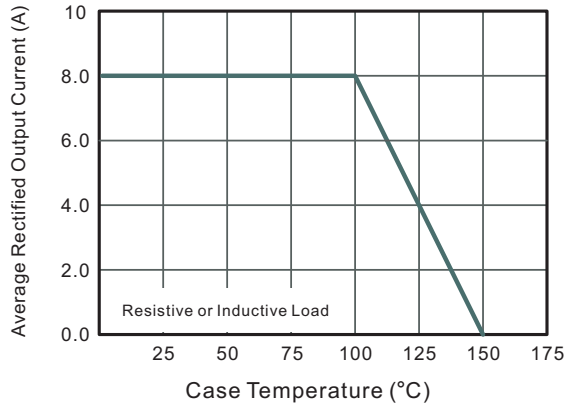


Fig.2 Typical Reverse Characteristics

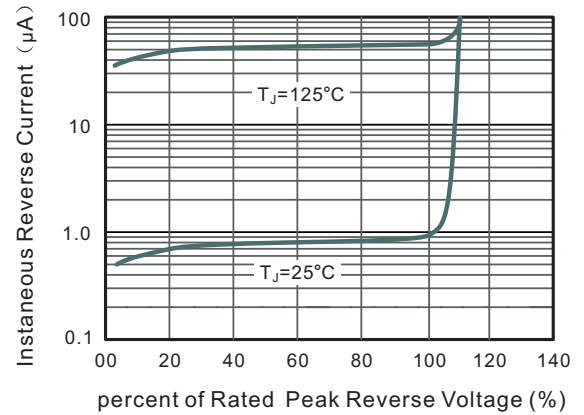


Fig.3 Typical Instantaneous Forward Characteristics

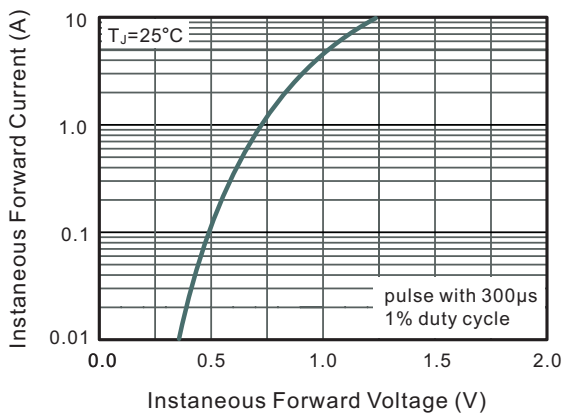


Fig.4 Typical Junction Capacitance

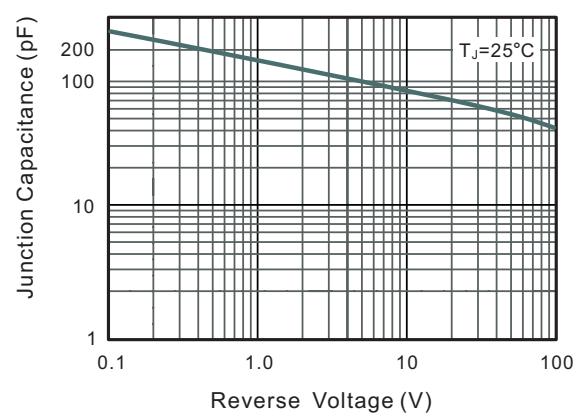


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

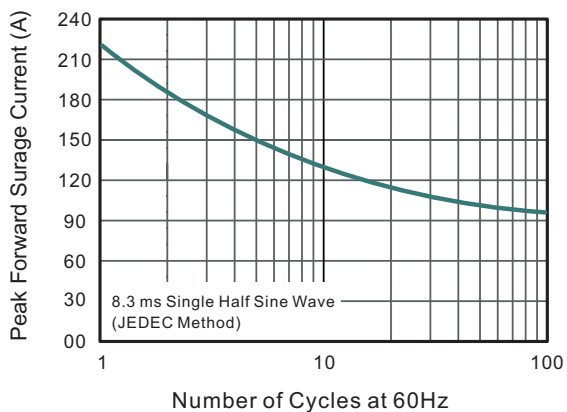
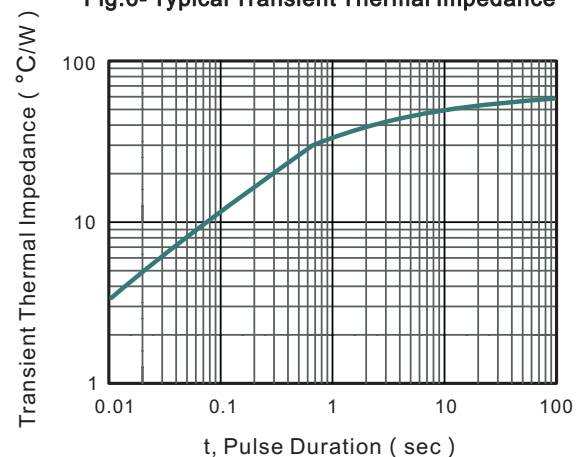


Fig.6- Typical Transient Thermal Impedance



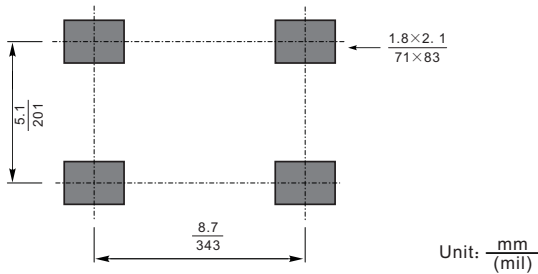
The curve above is for reference only.



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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.

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