

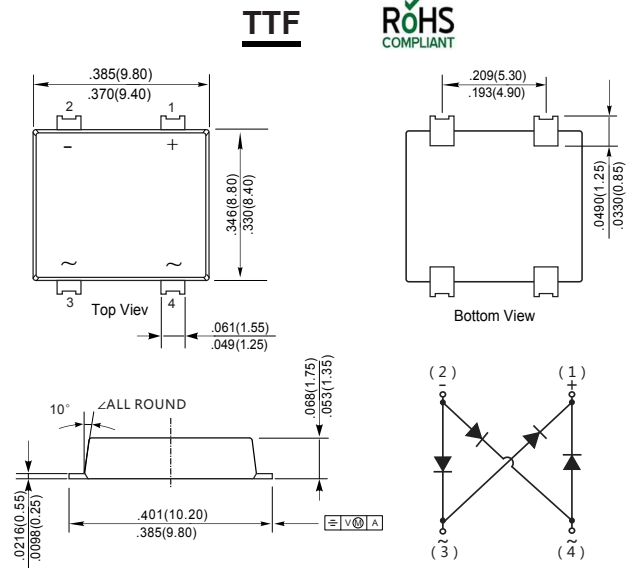
## 8A SURFACE MOUNT BRIDGE RECTIFIERS

### Features

- ◆ Reverse Voltage - 1000 V
- ◆ Forward Current- 8.0 A
- ◆ Fast reverse recovery time
- ◆ 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  
 Position: Any  
 Weight : 0.0163 ounce, 0.461 grams



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics (TA=25°C unless otherwise specified)

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

PARAMETER	SYMBOL	TTR8MF	Units
Maximum Recurrent 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 $T_C = 100^\circ\text{C}$	$I_o$	8.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	220	A
$I^2t$ Rating for Fusing	$I^2t$	220	A <sup>2</sup> S
Typical Thermal Resistance <sup>(1)</sup>	$R_{\theta JA}$	60	°C/W
	$R_{\theta JC}$	6	
	$R_{\theta JL}$	14	
Operating and Storage Temperature Range	$T_j, T_{stg}$	-55 ~ +150	°C

### Maximum Ratings And Electrical Characteristics (TA=25°C unless otherwise specified)

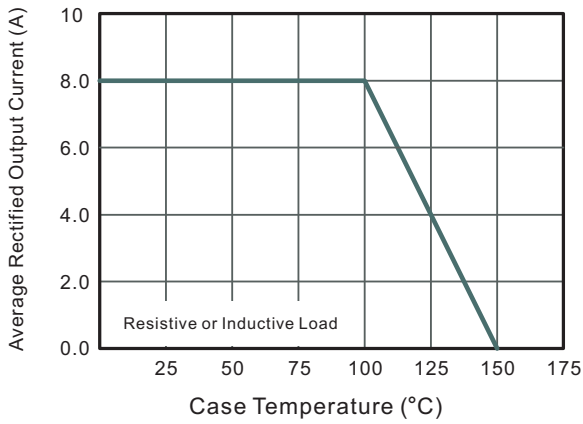
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	Units
Instantaneous forward voltage	$V_F$	$I_F = 1\text{A}$ $T_J = 25^\circ\text{C}$	—	0.83	—	V
		$I_F = 4\text{A}$ $T_J = 25^\circ\text{C}$	—	0.95	1.1	
		$I_F = 1\text{A}$ $T_J = 125^\circ\text{C}$	—	0.70	—	
		$I_F = 4\text{A}$ $T_J = 125^\circ\text{C}$	—	0.85	—	
Reverse current at DC blocking voltage	$I_R$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	— —	0.15 40	1 200	uA
Maximum Reverse Recovery Time	$t_{rr}$	Measured with $I_F = 0.5\text{A}$ , $I_R = 1\text{A}$ , $I_{rr} = 0.25\text{A}$ .	—	—	500	ns
Typical Junction Capacitance	$C_j$	$f = 1\text{MHz}$ , $V_R = 4\text{V DC}$ $T_J = 25^\circ\text{C}$	—	60	—	pF

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

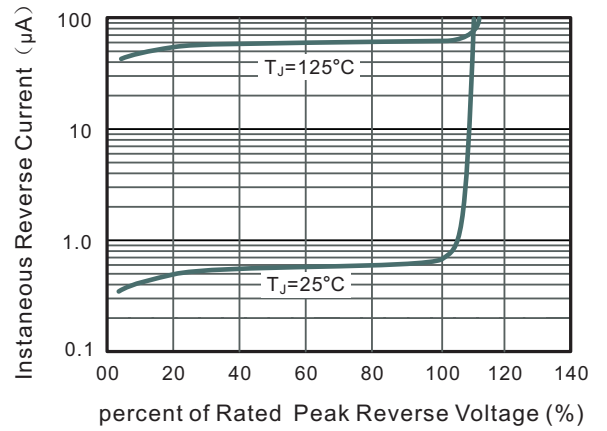
2. P.C.B. mounted with 4×1.5"×1.5" ( 3.81×3.81 cm ) copper pad areas.

## Typical Characteristics

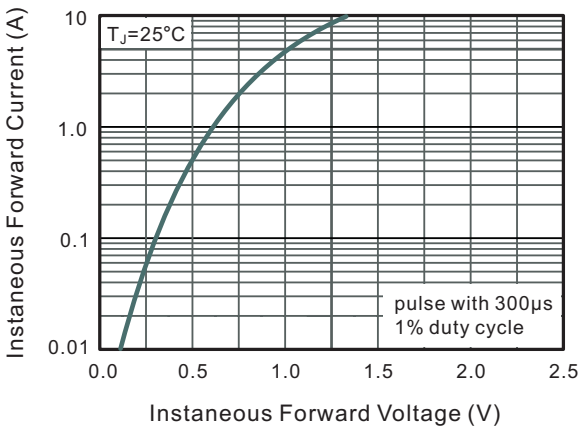
**Fig.1 Average Rectified Output Current Derating Curve**



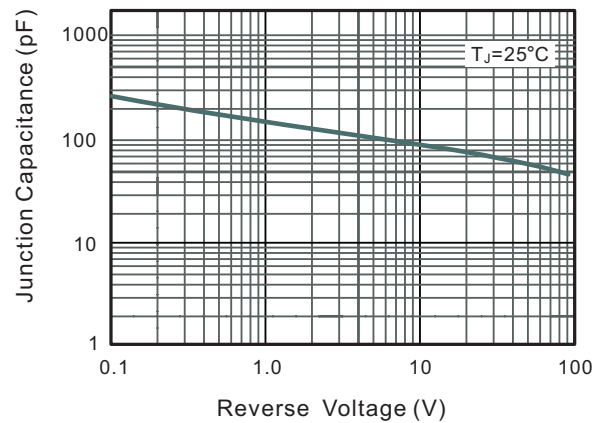
**Fig.2 Typical Reverse Characteristics**



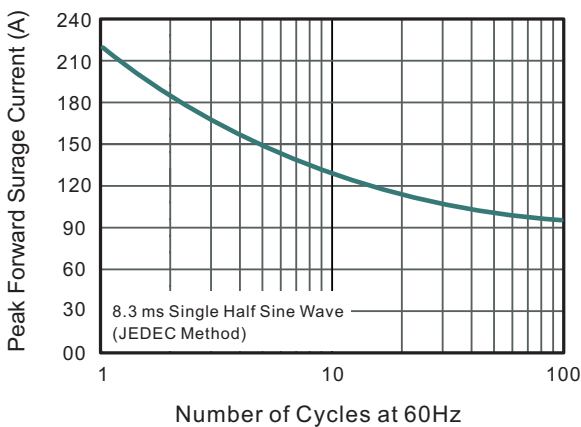
**Fig.3 Typical Instantaneous Forward Characteristics**



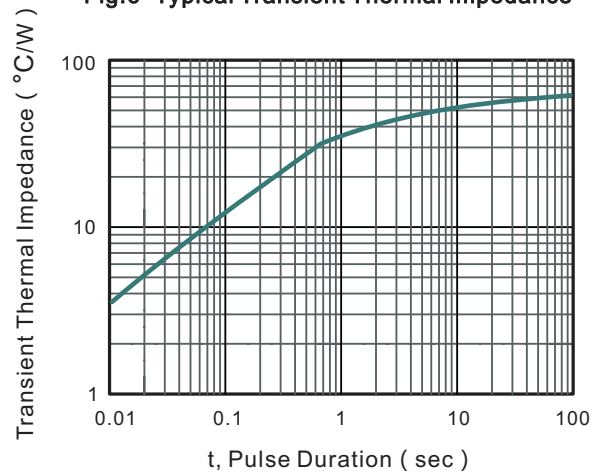
**Fig.4 Typical Junction Capacitance**



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

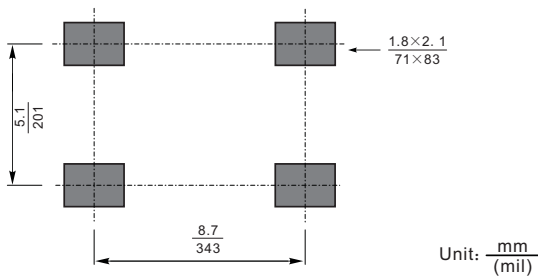


**Fig.6- Typical Transient Thermal Impedance**



The curve above is for reference only.

## 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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