

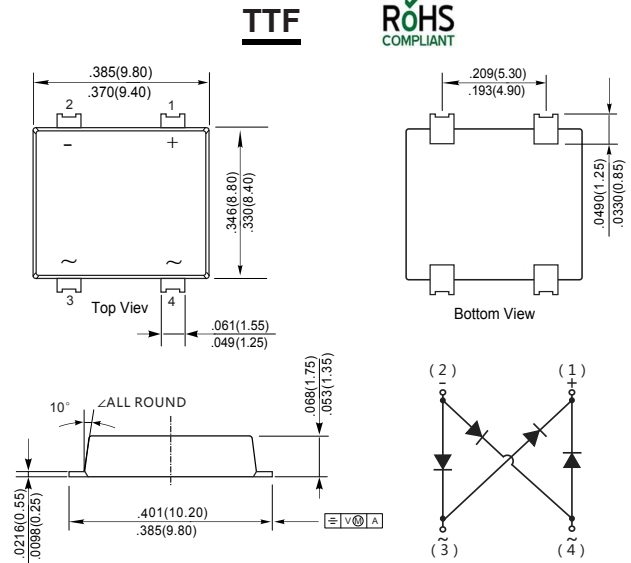
GLASS PASSIVATED SURFACE MOUNT BRIDGE RECTIFIERS

Features

- ◆ Glass Passivated Chip Junction
- ◆ Reverse Voltage - 1000 V
- ◆ Forward Current- 5.0 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 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 (TA=25°C unless otherwise specified)

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

PARAMETER	SYMBOL	TTR5MF	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	5.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	200	A
I^2t Rating for Fusing	I^2t	166	A ² S
Typical Thermal Resistance ⁽¹⁾	$R_{\theta JA}$	60	$^\circ\text{C/W}$
	$R_{\theta JC}$	6	
	$R_{\theta JL}$	14	
Operating and Storage Temperature Range	T_J, T_{stg}	-55 ~ +150	$^\circ\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	Units
Instantaneous forward voltage	V_F	$I_F = 5\text{ A}$ $T_J = 25^\circ\text{C}$	—	—	1.1	V
Reverse current at DC blocking voltage	I_R	$T_J = 25^\circ\text{C}$	—	—	5	μA
		$T_J = 125^\circ\text{C}$	—	—	200	
Maximum Reverse Recovery Time	t_{rr}	Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I = 0.25\text{ A}$.	—	—	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

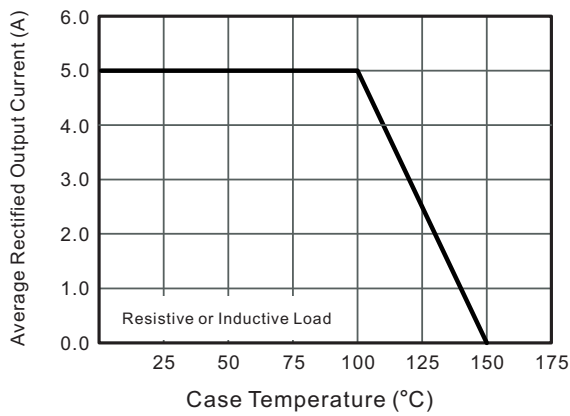


Fig.2 Typical Reverse Characteristics

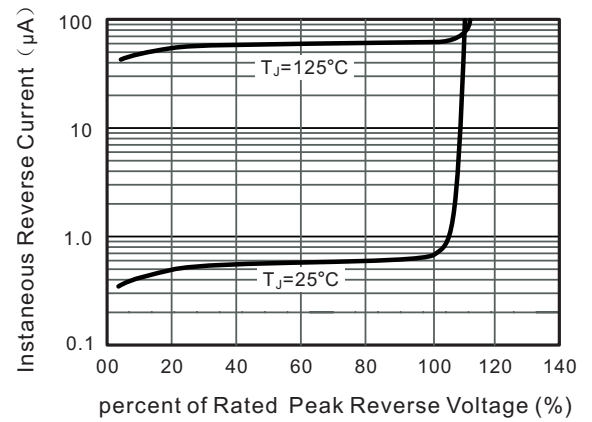


Fig.3 Typical Instantaneous Forward Characteristics

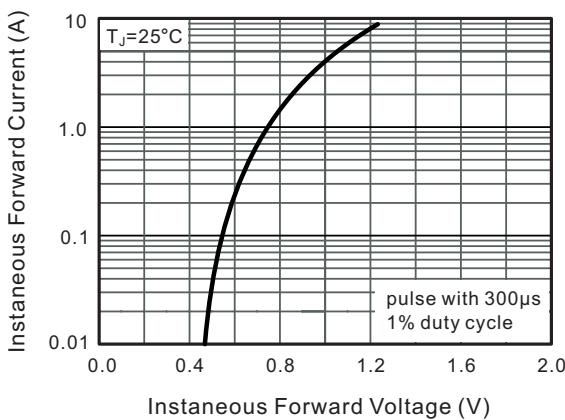


Fig.4 Typical Junction Capacitance

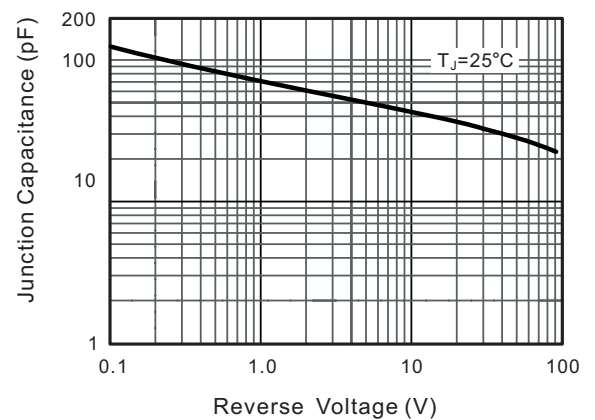


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

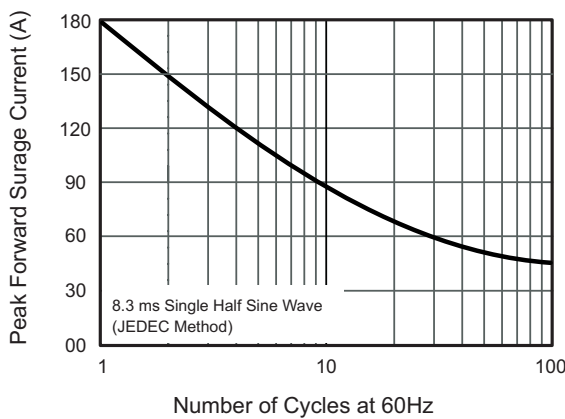
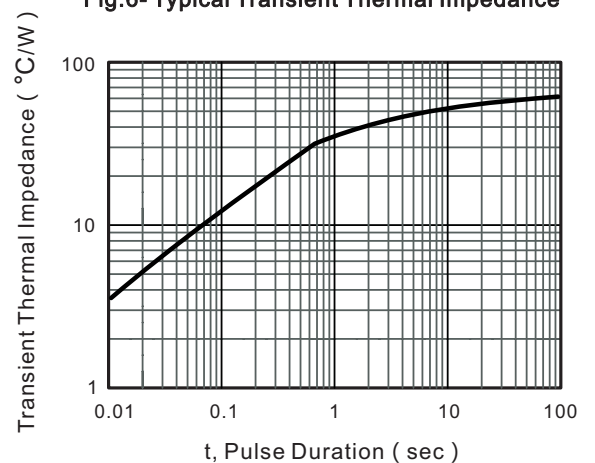
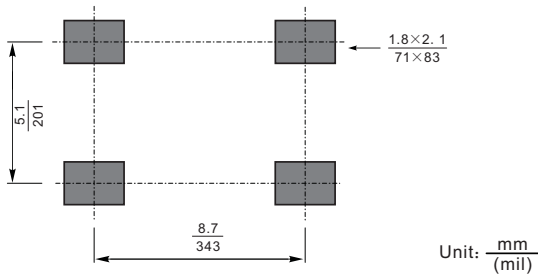


Fig.6- Typical Transient Thermal Impedance



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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