

**CURRENT** 8.0 Ampere  
**VOLTAGE RANG** 1000 Volts

## TT8M

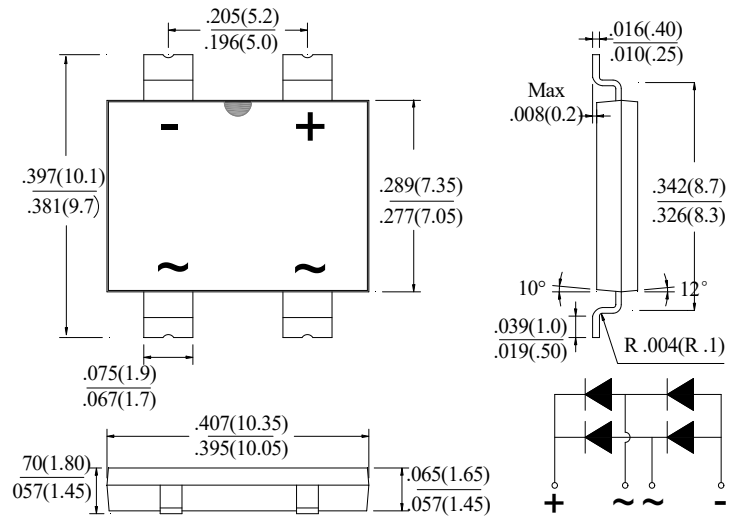
### TT

#### FEATURES

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- UL recognized file#E364304

#### MECHANICAL DATA

- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity: As marked on the body
- Weight: 389m grams (Approximate)
- Marking: TT8M



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

#### ABSOLUTE RATINGS

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	1000	V
Maximum DC blocking voltage	$V_{DC}$	1000	V
Average rectified output current per device	@ $T_A = 25^\circ\text{C}$ (Note1) $I_{(AV)}$	8.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	@ $T_A = 25^\circ\text{C}$ $I_{FSM}$	165	A
	@ $T_A = 125^\circ\text{C}$ (Note1) $I_{FSM}$	130	A
Peak forward surge current 1ms single half sine-wave superimposed on rated load	@ $T_A = 25^\circ\text{C}$ $I_{FSM}$	330	A
	@ $T_A = 125^\circ\text{C}$ (Note1) $I_{FSM}$	260	A
$I^2 t$ rating for fusing ( $t = 8.3\text{ms}$ )	$I^2 t$	70	$\text{A}^2\text{S}$
Operating and storage temperature range	$T_J, T_{STG}$	-55 to +150	$^\circ\text{C}$

#### STATIC ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITION	SYMBOL	TYP.	MAX.	UNIT
Forward voltage (Note1)	$I_F = 4\text{A}$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ (Note1)	$V_F$	0.96	1.0	V
			0.86	--	
Leakage current	$V_R = 1000\text{V}$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$ (Note1)	$I_R$	0.12	5	$\mu\text{A}$
			25	500	
Typical junction capacitance (Note2)		$C_J$	55		pF

#### THERMAL CHARACTERISTICS

PARAMETER	SYMBOL	TYP.	UNIT
Typical Thermal Resistance (without Heatsink)	$R_{thJc}$	7	$^\circ\text{C/W}$
	$R_{thJl}$	6	
	$R_{thJa}$	55	
Typical thermal resistance (Note3)	$R_{thJc}$	2	$^\circ\text{C/W}$
	$R_{thJl}$	6	
	$R_{thJa}$	10	

#### Note :

- (1) Perform static test after the temperature of oven is steady 20 minutes.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC
- (3) Thermal resistance junction to case, lead and ambient in accordance with JESD-51.  
Unit mounted on 15mmx12mmx1.6mm AL Pad attached on 160mmX160mmX5mm copper plate

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FIG.1- FORWARD CURRENT DERATING CURVE

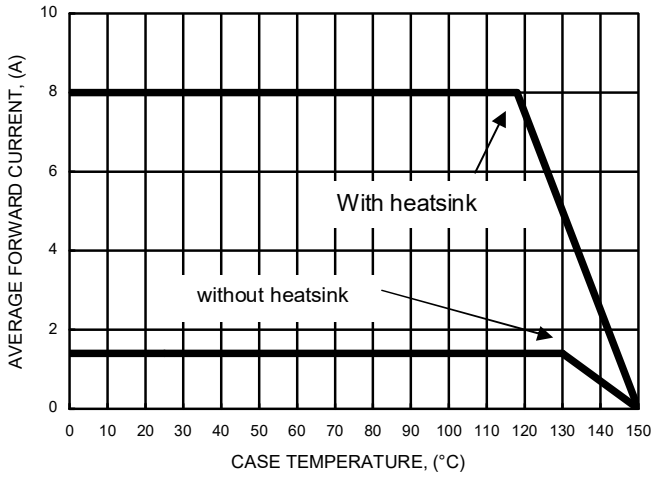


FIG.2- FORWARD CURRENT DERATING CURVE

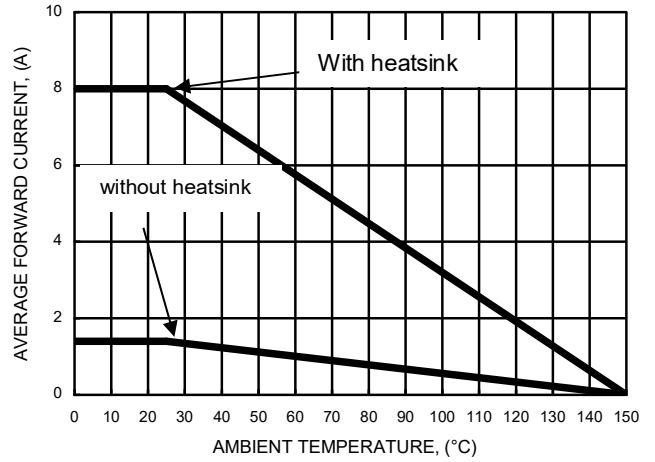


FIG.3- MAXIMUM NON-REPETITIVE SURGE CURRENT

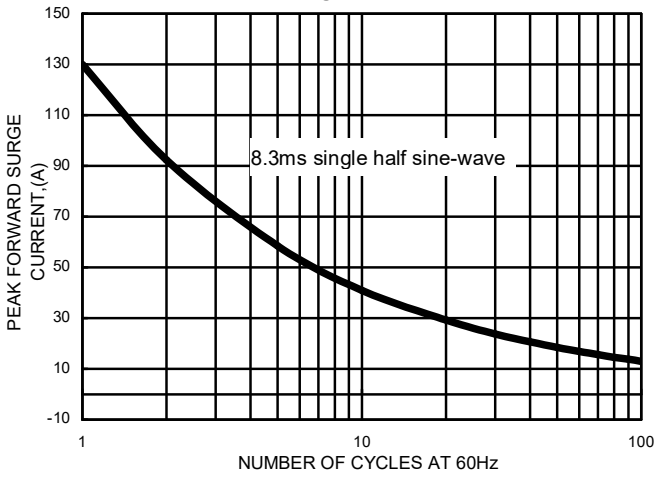


FIG.4- TYPICAL FORWARD CHARACTERISTICS

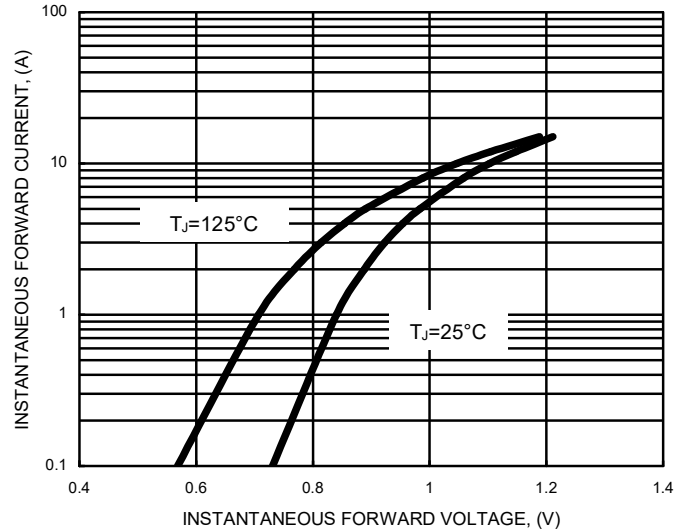


FIG.5- TYPICAL JUNCTION CAPACITANCE

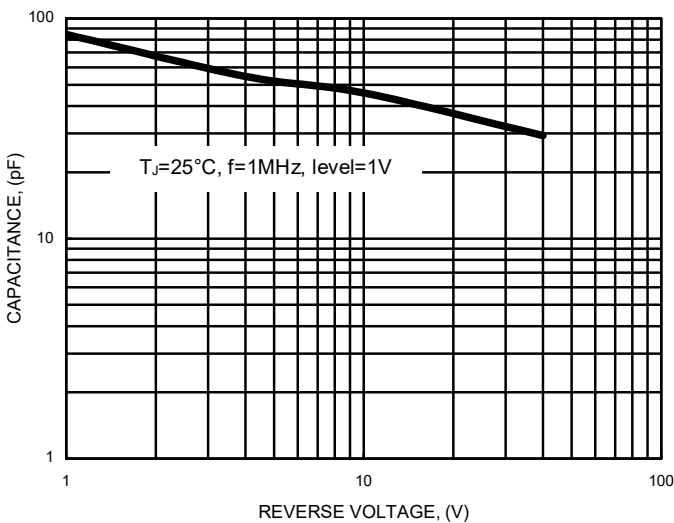


FIG.6- TYPICAL REVERSE CHARACTERISTICS

