TMBF2502 THRU TMBF2510

PINGWEI ENTERPRISE **SINGLE PHASE 2.5AMPS. GLASS PASSIVATED BRIDGE RECTIFIERS**

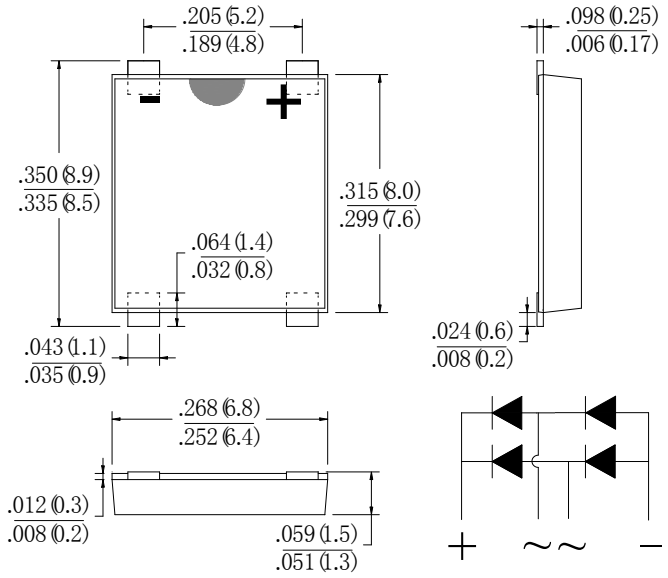
FEATURE

- Glass passivated junction.
- Ideal for printed circuit board.
- Reliable low cost construction utilizing molded plastic technique.
- High surge current capability.
- High temperature soldering guaranteed: 260℃/10 seconds at terminals.

MECHANICAL DATA

- Case Material: "Green" Molding compound, UL flammability classification rating 94V-0, "Free halogen"
- Moisture sensitivity level:level 2a,per J-STD-020
- Polarity:Polarity as marked on the body
- Weight: 0.204g (approximately)

TMBF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz,resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	SYMBOL	TMBF 2502	TMBF 2504	TMBF 2506	TMBF 2508	TMBF 2510	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	160	320	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	200	400	600	800	1000	V
Maximum Average Forward rectified Current @ T_A=40℃	$I_{F(AV)}$	2.5					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	80					A
Maximum Instantaneous Forward Voltage @I_F=1.25A DC @I_F= 2.5A DC	V_F	1.0 1.1					V
Maximum DC Reverse Current @T_J =25°C at rated DC blocking voltage @T_J =125°C	I_R	5.0 500.0					μA
I^2t Rating for Fusing (t < 8.3ms)	I^2t	26.5					A^2Sec
Typical Junction Capacitance Per Leg (Note1)	C_J	30					pF
Typical Thermal Resistance (Note2)	R_{JA}	40					°C /W
	R_{JC}	8					
Storage Temperature	T_{STG}	-55 to +150					°C
Operating Junction Temperature	T_J	-55 to +150					°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal resistance from Junction to case,lead and ambient in accordance with JESD-51.
   Unit mounted on glass-epoxy substrate with 1oz/ft2-30×30mmcopper pad per pin with heat sink.

RATING AND CHARACTERISTIC CURVES (TMBF2502 THRU TMBF2510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

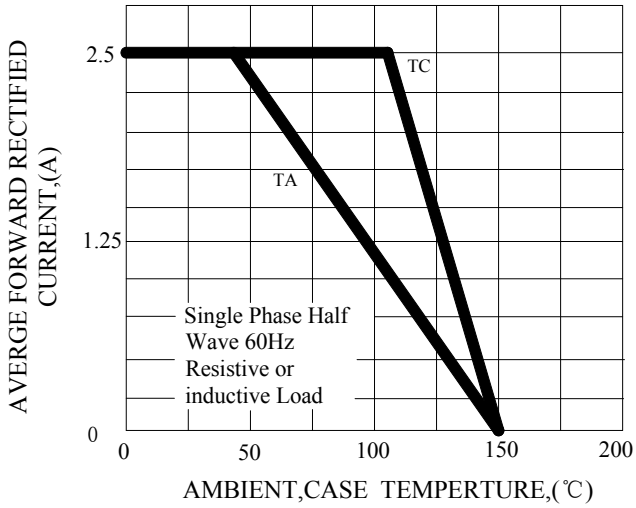


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

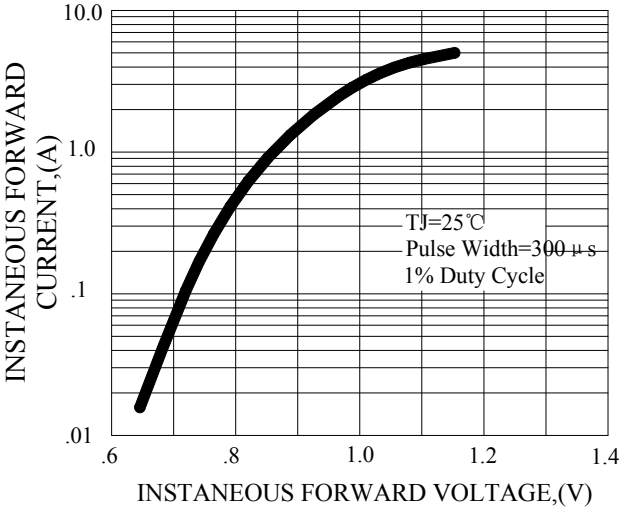


FIG.3-MAXIMUN NON-REPETITIVE FORWARD SURGE CURRENT

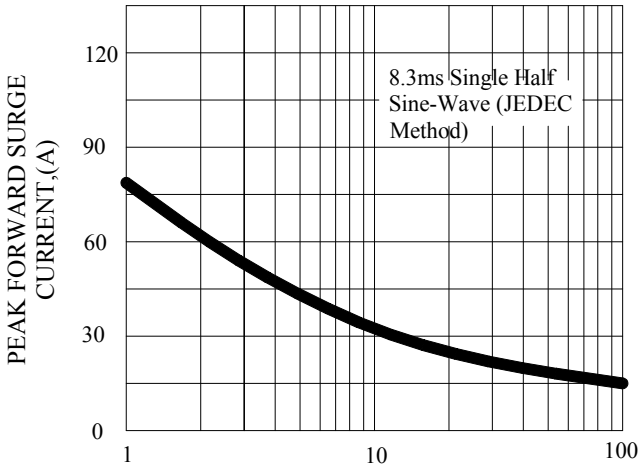


FIG.4-TYPICAL REVERSE CHARACTERISTICS

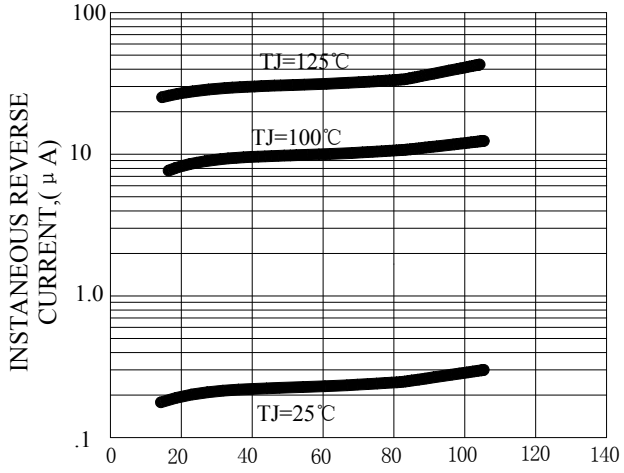


FIG.5-TYPIAL JUNCTION CAPAOTANCE

