

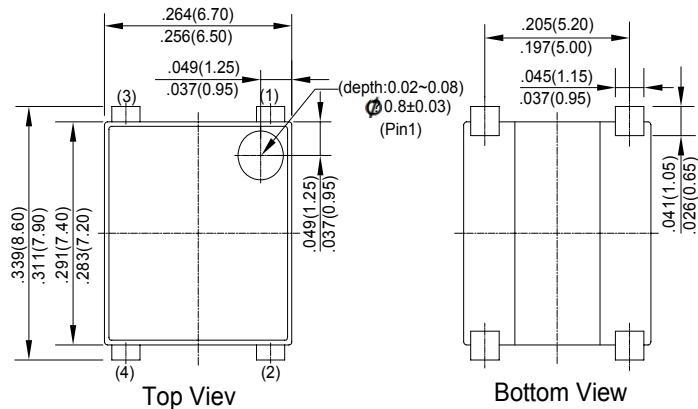


## TMBF3005 thru TMBF310

### 3.0 A Single-Phase Glass Passivated Bridge Rectifiers Rectifier Reverse Voltage 50 to 1000V

#### Features

- Rating to 1000V PRV
- Compact, thin profile package design
- Ideal for SMT manufacturing
- Reliable robust construction
- UL recognized file#E364304



- Molding compound meets UL 94 V-0 flammability rating, Halogen-free, RoHS-compliant, and commercial grade
- Polarity indicator: As marked on body
- Weight: 216 mg

#### Maximum Ratings & Thermal Characteristics

Dimensions in millimeters ( 1mm = 0.0394" )

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.  
For Capacitive load derate current by 20%.

Parameter	Symbol	TMBF 3005	TMBF 301	TMBF 302	TMBF 304	TMBF 306	TMBF 308	TMBF 310	unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current at TA=40°C	IF(AV)				3.0				A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM				80				A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t				26.56				A <sup>2</sup> sec
Typical thermal resistance per element(1)	ReJA				55				°C / W
Typical junction capacitance per element (2)	C				35.0				pF
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				°C

#### Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
For Capacitive load derate by 20 %.

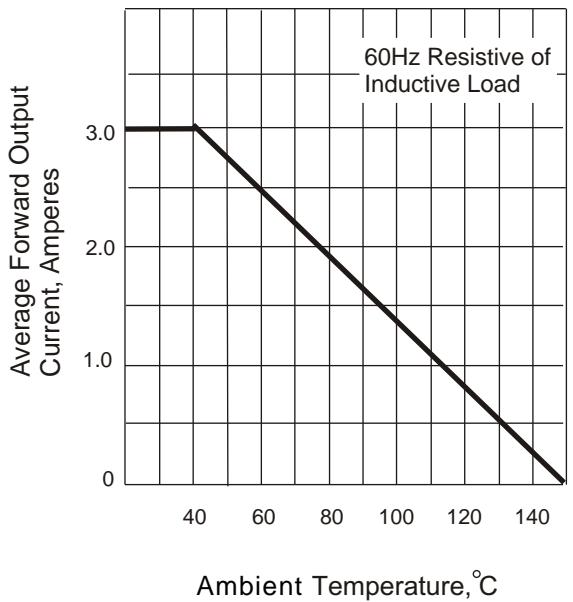
Parameter	Symbol	TMBF 3005	TMBF 301	TMBF 302	TMBF 304	TMBF 306	TMBF 308	TMBF 310	Unit
Maximum instantaneous forward voltage drop per leg at 1.5A	VF				1.05				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR				5 500				μA

Notes: (1)Thermal resistance from Junction to Ambient on P.C.board mounting.

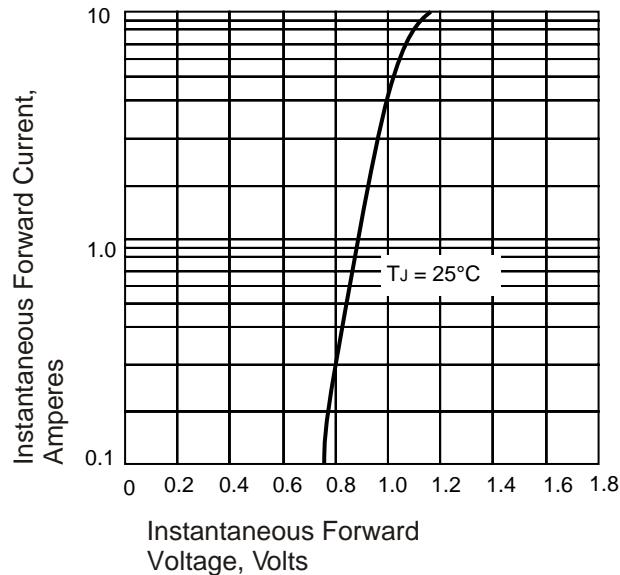
(2)Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

**Rating and Characteristic Curves** ( $T_A=25^\circ\text{C}$  Unless otherwise noted )  
**TMBF3005 thru TMBF310**

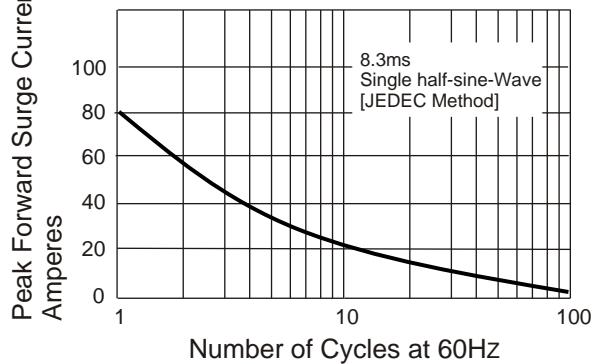
**Fig. 1 Derating Curve for Output Rectified Current**



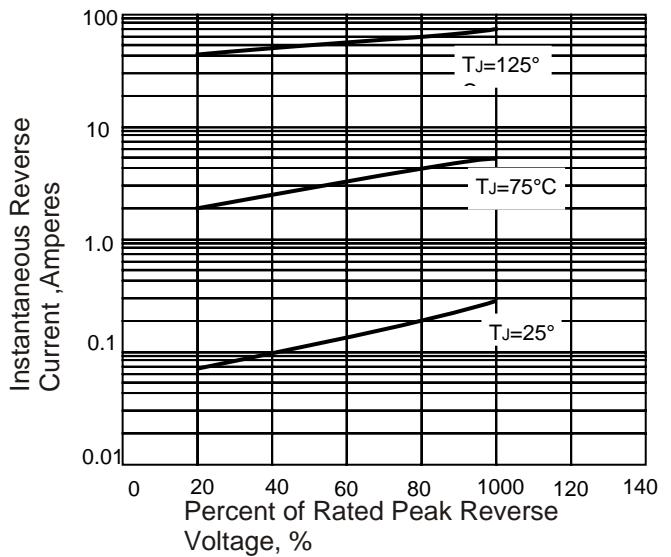
**Fig. 3 Typical Instantaneous Forward Characteristics**



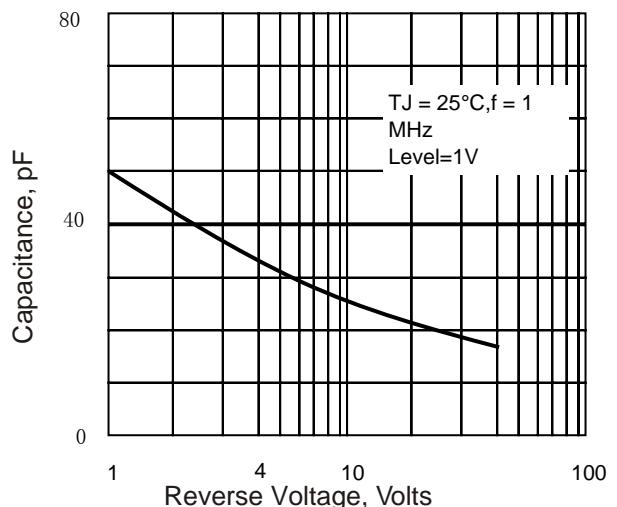
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 4 Typical Revers Characteristics**



**Fig. 5 Typical Junction Capacitance**



# X-ON Electronics

Largest Supplier of Electrical and Electronic Components

***Click to view similar products for Bridge Rectifiers category:***

***Click to view products by Shandong Baocheng manufacturer:***

Other Similar products are found below :

[MB2510](#) [MB252](#) [MB356G](#) [MB358G](#) [MP358-BP](#) [90MT160KPBF](#) [GBJ1504-BP](#) [GBU10B-BP](#) [GBU15J-BP](#) [GBU15K-BP](#) [GBU4A-BP](#)  
[GBU4D-BP](#) [GBU6B-E3/45](#) [GSIB680-E3/45](#) [DB101-BP](#) [DF01](#) [DF10SA-E345](#) [BU1508-E3/45](#) [BU1510-E3/45](#) [KBPC50-10S](#) [RS405GL-BP](#)  
[G5SBA60-E3/51](#) [GBJ1502-BP](#) [GBU10J-BP](#) [GBU6M](#) [GBU8D-BP](#) [GBU8J-BP](#) [GSIB1520-E3/45](#) [TB102M](#) [MB1510](#) [MB6M-G](#) [MB86](#)  
[TL401G](#) [MDA920A2](#) [TU602](#) [TU810](#) [MP501W-BP](#) [MP502-BP](#) [BR1005-BP](#) [BR101-BP](#) [BR84DTP204](#) [BU1010A-E3/51](#) [BU1508-E3/51](#)  
[BU2008-E3/51](#) [US15KB80R-7000](#) [KBPC25-02](#) [VS-2KBB60](#) [VS-60MT120KPBF](#) [DB105-BP](#) [DF1510S](#)