

■ **Features**

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Fast reverse recovery time

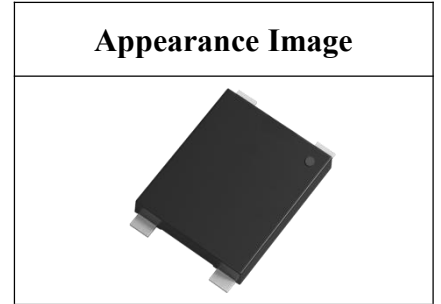
Reverse Voltage 50-1000 V
Forward Current 3.0 A max

■ **Applications**

- General purpose use in AC/DC bridge full wave rectification

■ **Mechanical Data**

- Case: TMBF
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



■ **Marking**

- TMBFR30(05~10)

■ **Maximum Ratings @ Ta = 25°C unless otherwise noted**

PARAMETER	SYMBOL	UNIT	TMBFR 3005	TMBFR 301	TMBFR 302	TMBFR 304	TMBFR 306	TMBFR 308	TMBFR 310	
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000	
Maximum RMS voltage	V_{RMS}	V	35	70	140	280	420	560	700	
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000	
Maximum average output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	3.0							
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	100							
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	200							
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A ² S	41.50							
Maximum reverse recovery time	T_{rr}	ns	150				250		500	
Storage temperature	T_{stg}	°C	-55~+150							
Junction temperature	T_j	°C	-55~+150							

■ **Electrical Characteristics @ Ta = 25°C unless otherwise noted**

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	TMBFR 3005	TMBFR 301	TMBFR 302	TMBFR 304	TMBFR 306	TMBFR 308	TMBFR 310
Maximum instantaneous forward voltage	$I_F=1.5A$	V_F	V	1.3						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_j=25°C$	I_R	μA	5						
	$V_R=V_{DC}, T_j=100°C$	I_R		100						

■ **Characteristic Curve (Typical)**

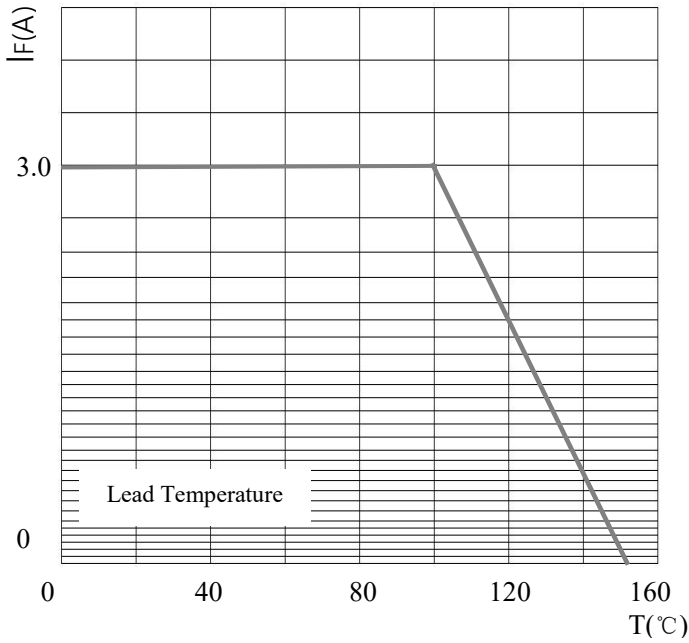


FIG1. Derating Curve For Output Rectified Current

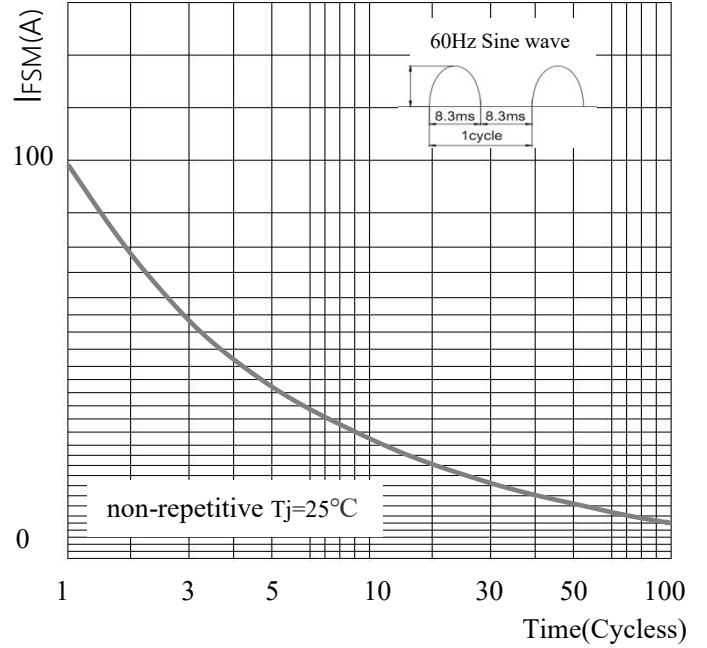


FIG2. Surge Forward Current Capability

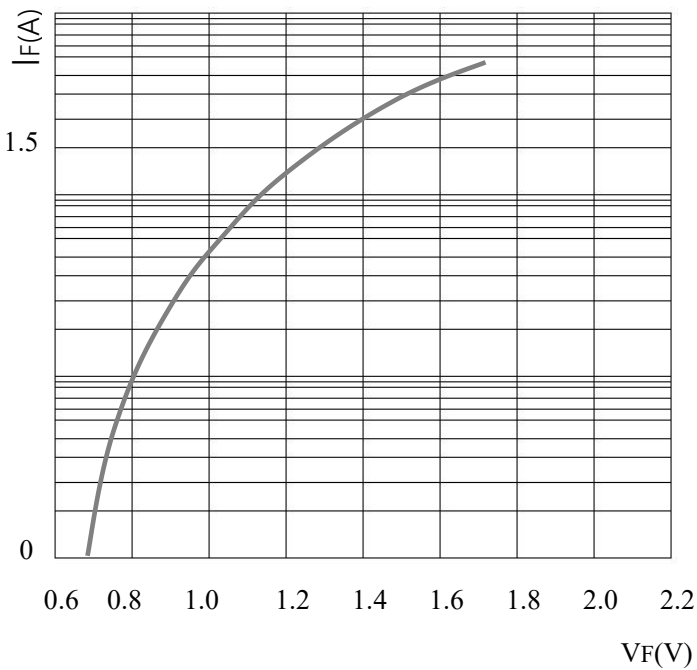


FIG3. Typical Forward Characteristics

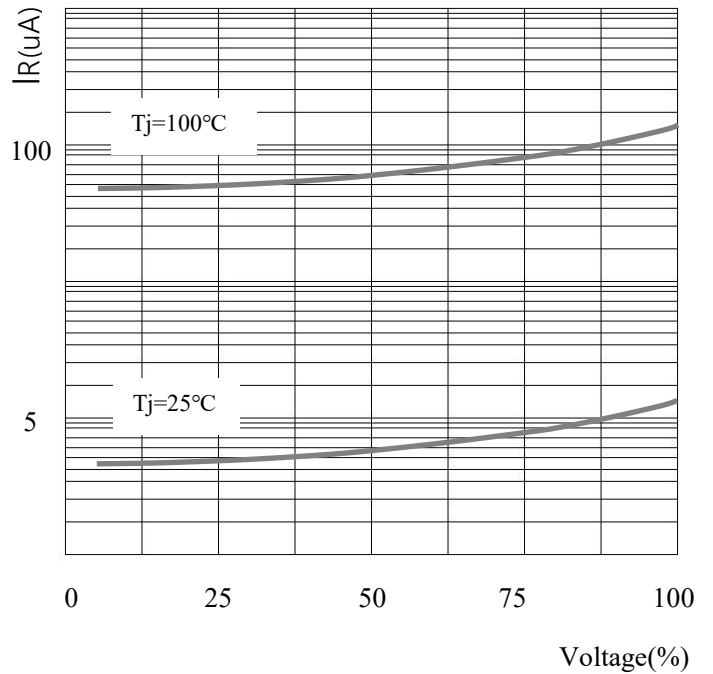


FIG4. Typical Reverse Characteristics

■ **Marking and packet information**



TMBF***:Product Type Code **TOS** : Brand Loge

Packaging information	
Reel	3000PCS
Carton	54000PCS
Reel Size	13"

■ **TMBF Package outline dimensions**

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	1.3	1.5	0.051	0.059
C	0.17	0.29	0.007	0.012
D	6.2	7.0	0.244	0.276
E	7.1	7.6	0.280	0.299
E1	8.4	8.9	0.331	0.350
L	1.0	1.6	0.032	0.055
e	4.9	5.3	0.193	0.209
b	0.95	1.15	0.037	0.045
θ	10°			

■ **Notice**

XILONG reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. xilong does not assume any liability arising out of the application or use of any product described herein.