

■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

■ Applications

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

■ Mechanical Data

- Case: MBF
- 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



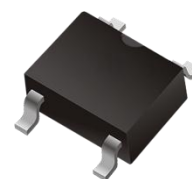
Reverse Voltage

50-1000 V

Forward Current

0.8 A max

Appearance Image



■ Marking

- MBxxF(05~10)

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

PARAMETER	SYMBOL	UNIT	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F
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	0.8						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	30						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	60						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A²S	3.74						
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	MB05F	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F
Maximum instantaneous forward voltage	$I_F=0.4A$	V_F	V	1.0						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, Tj=25°C	I_R	μA	5						
	$V_R=V_{DC}$, Tj=100°C	I_R		100						

■ Characteristic Curve (Typical)

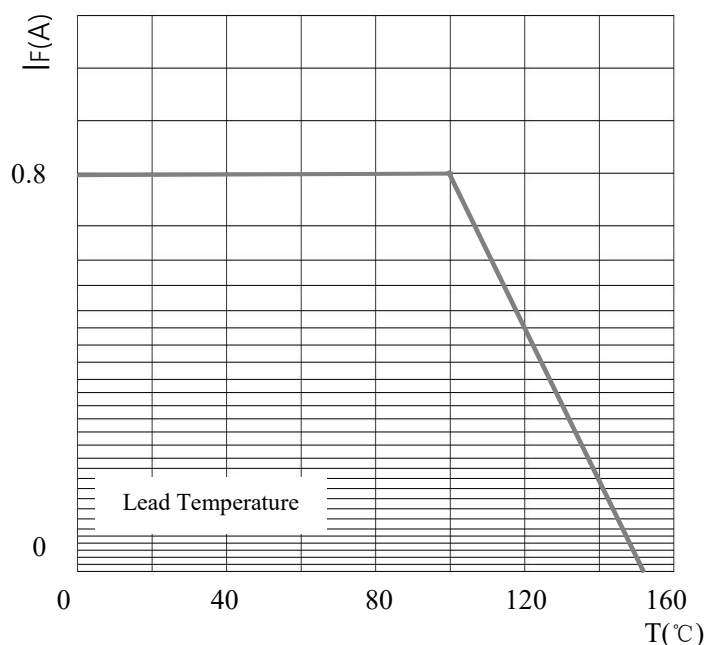


FIG1. Derating Curve For Output Rectified Current

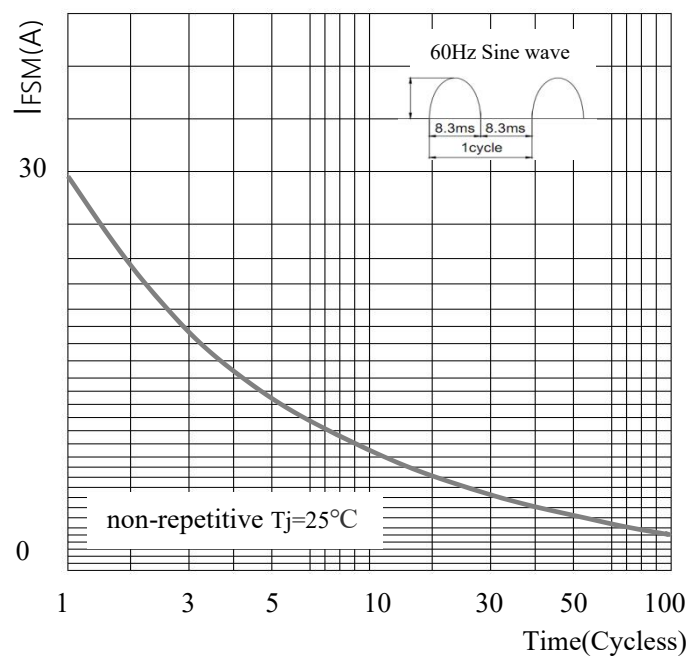


FIG2. Surge Forward Current Capability

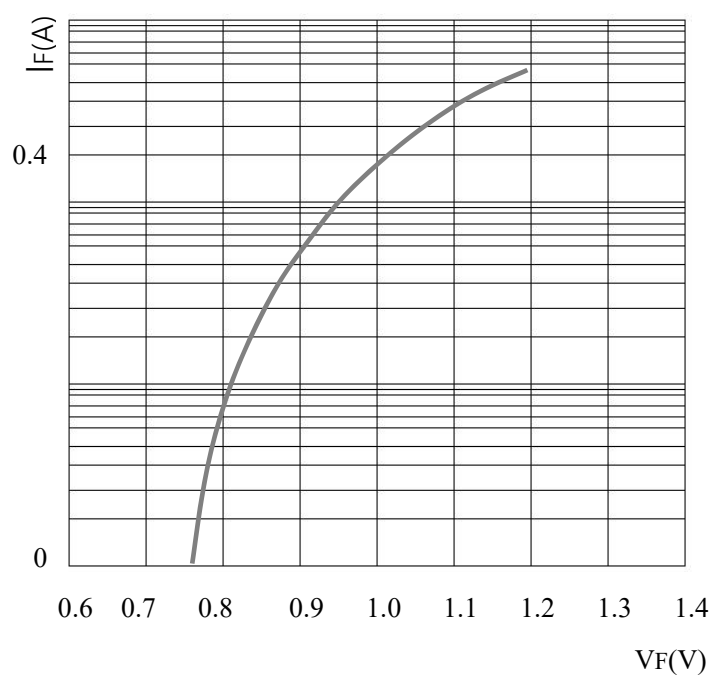


FIG3. Typical Forward Characteristics

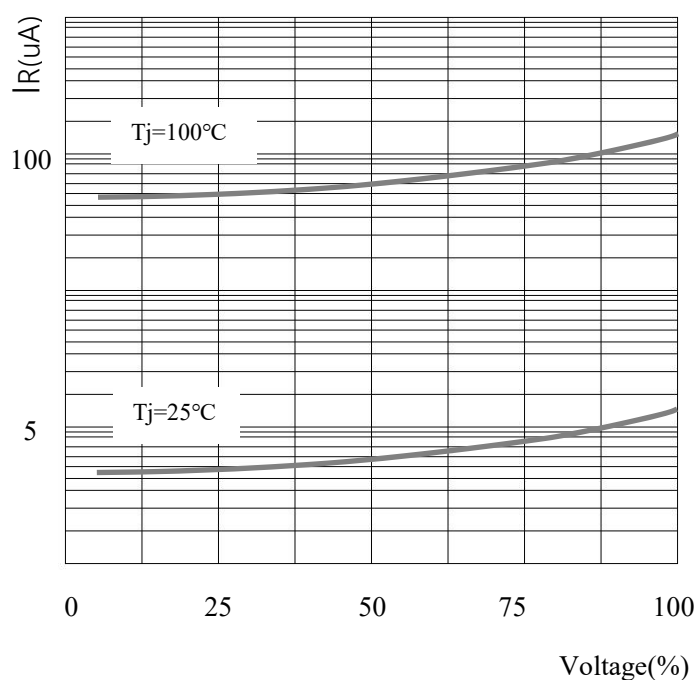
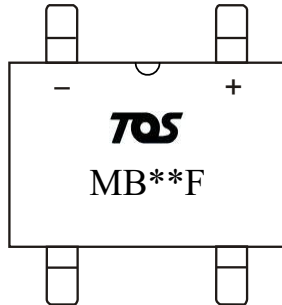


FIG4. Typical Reverse Characteristics

■ Marking and packet information



MB**F : Product Type Code **TOS** : Brand Loge

Packaging information	
Reel	5000PCS
Carton	100000PCS
Reel Size	13"

■ MBF Package outline dimensions

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.5	4.9	0.177	0.193
A1	-	0.2	-	0.008
B	1.35	1.45	0.053	0.057
C	-	7.0	-	0.275
E	3.6	4.0	0.141	0.157
L	0.7	1.1	0.027	0.043
N	0.15	0.35	0.006	0.014
b	0.6	0.8	0.023	0.031
e	2.3	2.7	0.09	0.106

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