

■ **Features**

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

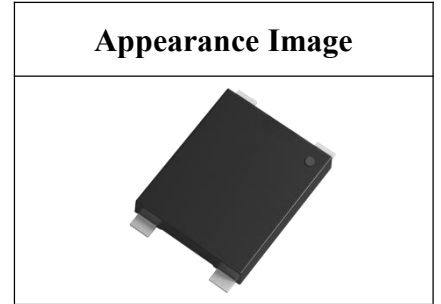
<b>Reverse Voltage</b> 50-1000 V
<b>Forward Current</b> 3.0 A max

■ **Applications**

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

■ **Mechanical Data**

- Case: MSB
- 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**

- FMSB30(A~M)

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

PARAMETER	SYMBOL	UNIT	FMSB30A	FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M	
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 <sup>2</sup> 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	FMSB30A	FMSB30B	FMSB30D	FMSB30G	FMSB30J	FMSB30K	FMSB30M
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)**

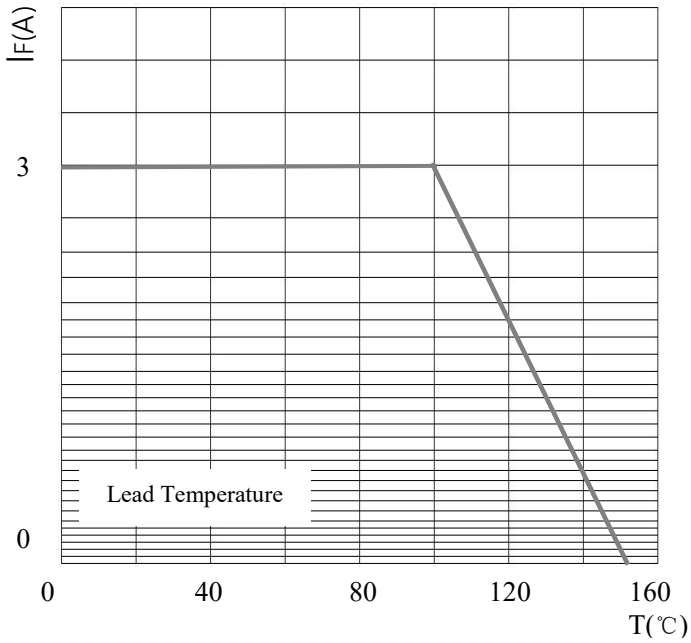


FIG1. Derating Curve For Output Rectified Current

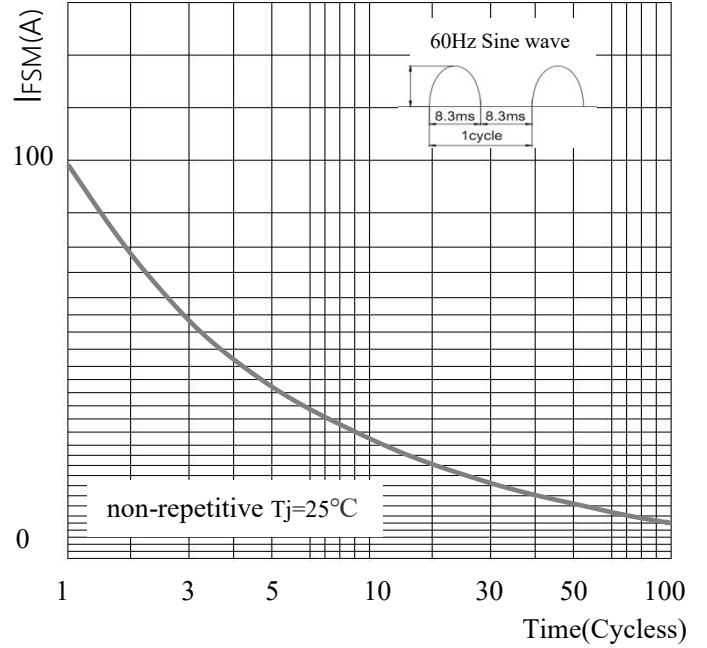


FIG2. Surge Forward Current Capability

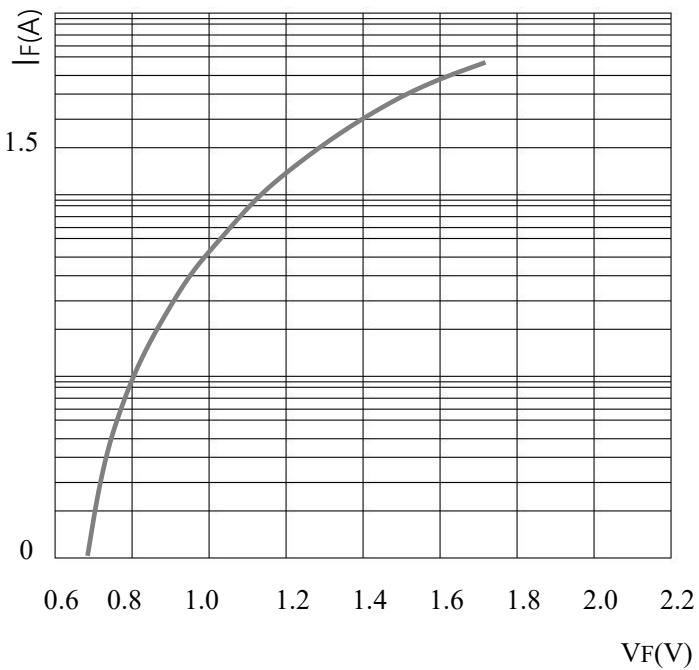


FIG3. Typical Forward Characteristics

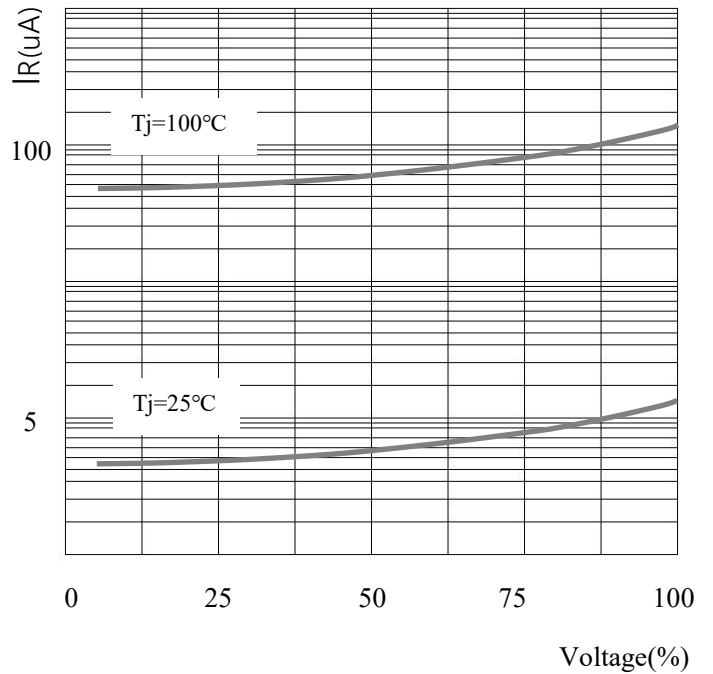


FIG4. Typical Reverse Characteristics

■ **Marking and packet information**



FMB\*\*\*:Product Type Code    **TOS** : Brand Loge

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

■ **MSB 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
$\theta$	10°			

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