



RMB12F-RMB16F

SURFACE MOUNT BRIDGE RECTIFIERS

Major Ratings and Characteristics

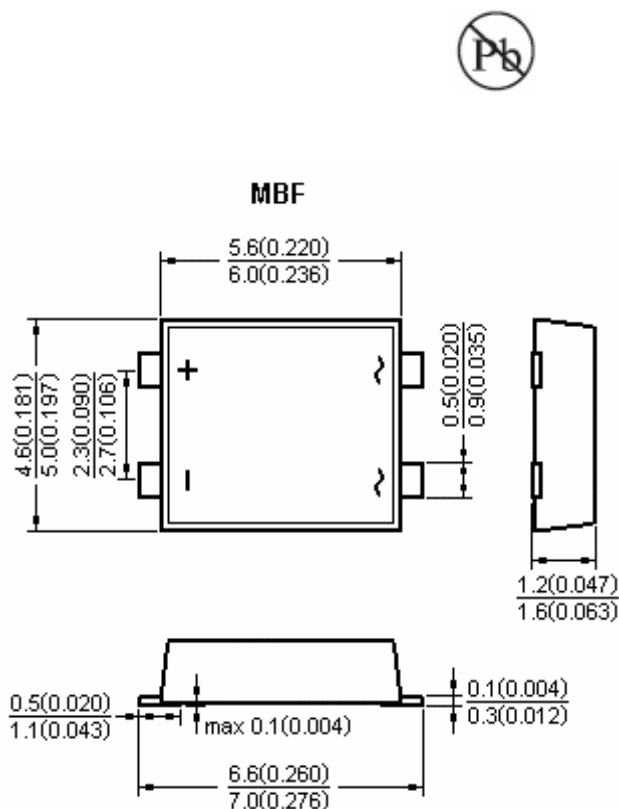
$I_{F(AV)}$	1.0A
V_{RRM}	200-600V
I_{FSM}	30 A
I_R	5.0 μ A
t_{rr}	150nS,250nS
V_F	1.25V
T_j max.	150 °C

Features

- Low profile space
- Ideal for automated placement
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering:
260°C/10 seconds at terminals
- Component in accordance to
RoHS 2002/95/1 and WEEE 2002/96/EC

Mechanical Data

- Case: MBF Molded plastic
over glass passivated chip
- Terminals: Solder plated, solderable per
J-STD-002B and JESD22-B102D
- Polarity: Polarity symbols marked on body



Dimensions in millimeters and (inches)

Maximum Ratings & Thermal Characteristics & Electrical Characteristics

($T_A = 25\text{ }^{\circ}\text{C}$ unless otherwise noted)

	Symbol	RMB12F	RMB14F	RMB16F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward output rectified current at $T_A=30^{\circ}\text{C}$	$I_{F(AV)}$	1			A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load(JEDEC Method)	I_{FSM}	30			A
Maximum instantaneous forward voltage drop per leg at 1.0A	V_F	1.25			V
Maximum DC reverse current at $T_A = 25\text{ }^{\circ}\text{C}$ rated DC blocking voltage per leg $T_A = 125^{\circ}\text{C}$	I_R	5.0 100			μ A
Maximum reverse recovery time at $I_F = 0.5\text{ A}$, $I_R = 1.0\text{ A}$, $I_{rr} = 0.25\text{ A}$	t_{rr}	150		250	nS
Thermal resistance per leg (Note:1)	$R_{\theta JA}$	80			$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150			$^{\circ}\text{C}$

NOTE1: Units mounted on P.C.B. with 0.05×0.05" (1.3×1.3mm) pads



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Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1 Derating Curve For Output Rectified Current

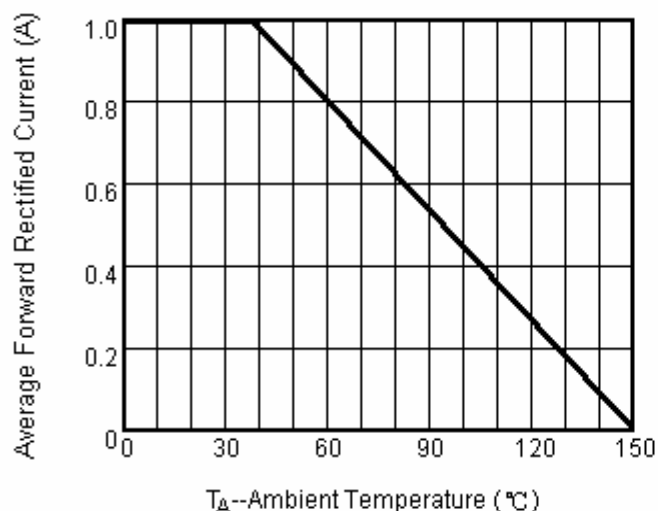


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current Per Leg

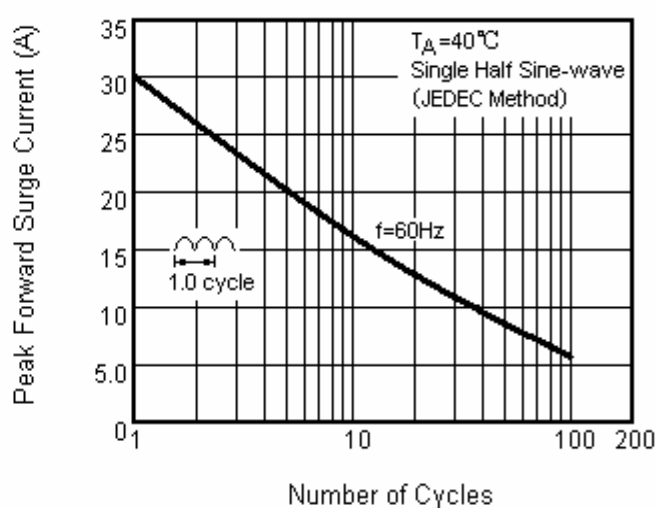


Fig.3 Typical Forward Voltage Characteristics Per Leg

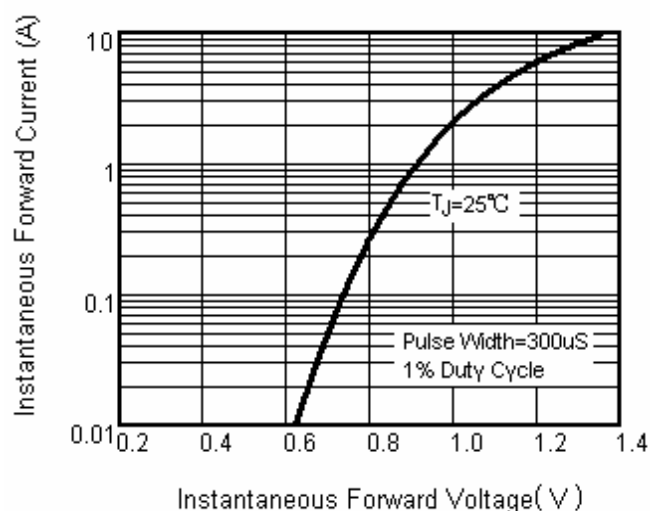


Fig.4 Typical Reverse Leakage Characteristics Per Leg

