MMB1G-MMB10G

SILICON BRIDGE RECTIFIERS

FEATURES

- Glass：passivated chip junctions
- High surge overload rating: 30A peak
- Saves space on printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds at 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026

Maximum Ratings (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	MMB1G	MMB2G	MMB4G	MMB6G	MMB8G	MMB10G	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forward Output current @T_A=25℃	$I_{F(AV)}$	1						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	30						A
I²t Rating for fusing @Tj=25℃	I²t	3.7						A²S

Thermal Characteristics

Characteristic	Symbol	MMB1G	MMB2G	MMB4G	MMB6G	MMB8G	MMB10G	UNITS
Typical junction capacitance per leg (NOTE 3)	C_J	8						p F
Typical thermal resistance per leg (NOTE 1) (NOTE 2)	$R_{\Theta JA}$ $R_{\theta JL}$ $R_{\theta JC}$	85 20 30						℃/W
Operating junction temperature range	T_J	- 55 ---- + 150						℃
Storage temperature range	T_{STG}	- 55 ---- + 150						℃

Electrical Characteristics (@TA = 25°C unless otherwise specified)

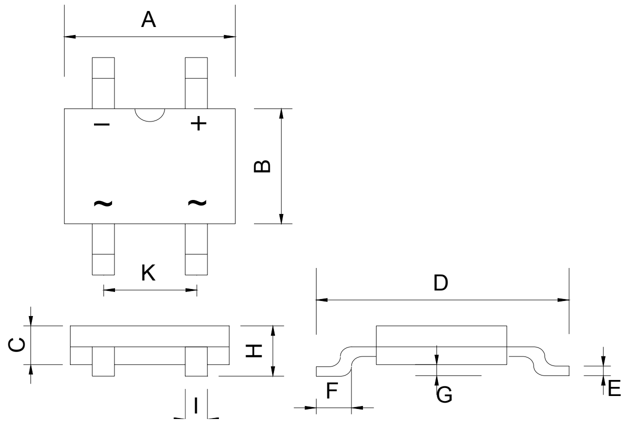
Characteristic	Symbol	MMB1G	MMB2G	MMB4G	MMB6G	MMB8G	MMB10G	UNITS
Maximum instantaneous forward voltage at 0.4 A	V_F	1.0						V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 0.5						μ A m A

NOTES: (1) On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads

(2) On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

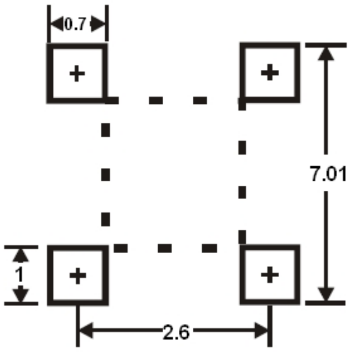
(3) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

PACKAGE OUTLINE DIMENSIONS



MMB		
Dim	Min	Max
A	4.45	4.75
B	3.50	3.80
C	1.25	1.60
D	6.55	6.90
E	0.18	0.22
F	0.85	1.10
G	0.00	0.15
H	1.30	1.60
I	0.60	0.80
K	2.35	2.65
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit ： mm

PACKAGE INFORMATION

Device	Package	Shipping
MMB1G--MMB10G	MMB	5000/Tape&Reel

Ratings and Characteristic Curves (T$_A$=25°C unless otherwise noted)

Fig.1-Forward Current Derating Curve

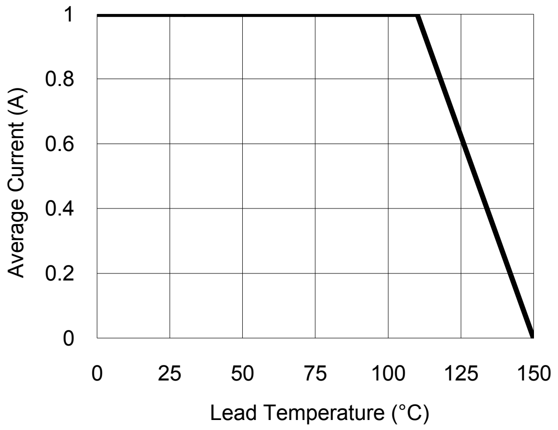


Fig.2- Surge Current Derating Curve

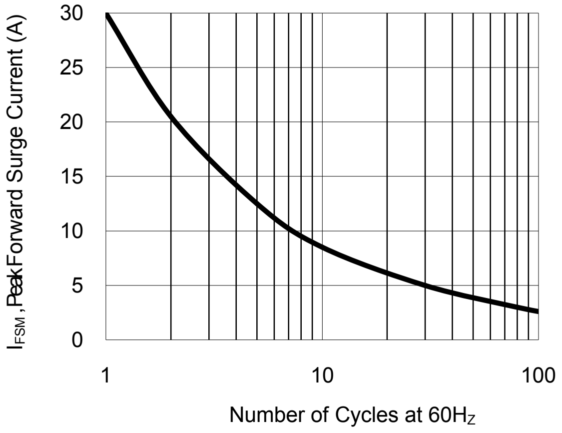


Fig.3- Typical Forward Voltage Characteristic

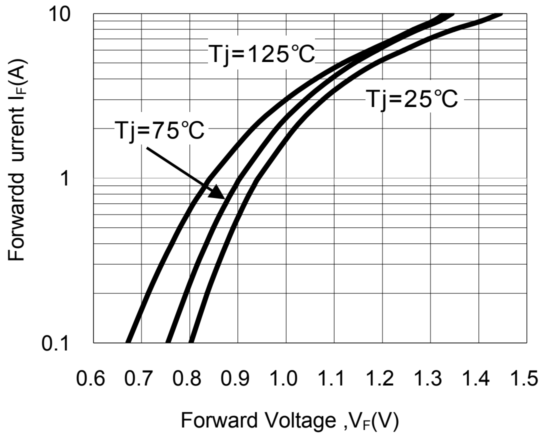


Fig.4- Typical Reverse Characteristic