



Square bridge

Surface Mount Si-Bridge Rectifiers

MB2S ... MB6S

Forward Current: 0,8 A

Reverse Voltage: 80 to 600 V

Publish Data

Features

- max. solder temperature 260°C, max. 5s
- Epoxy material has UL - classification 94V-0
- Silicon Passivated

Mechanical Data

- Plastic case 4,7 * 3,9 * 2,4 [mm]
- Weight approx. 0,1 g
- Terminals: LEAD FREE plated terminals solderable per IEC68-2-20
- Mounting position: any
- Standard packaging taped and reeled

Type	Alternating Input voltage V_{VRMS} V	Repetitive peak reverse voltage V_{RRM} V	Max. admissible load capacitor C_L μF	Min. required protective resistor R_t Ω
MB2S	140	200	1500	2,5
MB4S	280	400	800	5
MB6S	420	600	600	8,5

Absolute Maximum Ratings		$T_c = 25^\circ\text{C}$ unless otherwise specified	
Symbol	Conditions	Values	Units
I^2t	Rating for fusing, $t < 10$ ms	5	A ² s
I_{FRM}	Repetitive peak forward current > 15 Hz	10	A
I_{FSM}	Peak forward surge current, 50 Hz half sine-wave	35	A
t_{rr}	Reverse recovery time ($I_F = A$)	/	ns
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}$ ¹⁾	0,8	A
I_{FAV}	Max. averaged fwd. current, C-load, $T_A = 50^\circ\text{C}$ ¹⁾	0,6	A
I_{FAV}	Max. current with cooling fin, R-load, $T_c = ^\circ\text{C}$ ²⁾	/	A
I_{FAV}	Max. current with cooling fin, C-load, $T_c = ^\circ\text{C}$ ²⁾	/	A
R_{thA}	Thermal resistance junction to ambient ¹⁾	70	K/W
R_{thC}	Thermal resistance junction to case ¹⁾		K/W
T_j	Operating junction temperature	- 55 ... + 150	°C
T_s	Storage temperature	- 55 ... + 150	°C

Characteristics		$T_c = 25^\circ\text{C}$ unless otherwise specified	
Symbol	Conditions	Values	Units
V_F	Maximum forward voltage, $T_j = 25^\circ\text{C}$, $I_F = 0,4$ A	1	V
I_R	Maximum leakage current, $T_j = 25^\circ\text{C}$, $V_R = V_{RRM}$	5	μA
C_J	Typical junction capacitance per leg at V, MHz		pF



