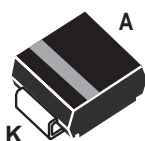


Surface Mount Fast Recovery Rectifier

RS2MB

SMB



Cathode  **Anode**

Features

- Low forward voltage drop
- Low leakage
- High current capability
- Super fast switching speed
- High forward surge capability
- High reliability.

Mechanical Data

- Epoxy: UL 94V-O rate flame retardant
- Lead: lead solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

■Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbols	RS2MB	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Maximum Average Forward Rectified Current	I _{AV}	2.0	A
Reverse Recovery Time. IF=0.5A, IR=1A, IRR=0.25A	T _{rr}	500	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50	A
I ² t rating for fusing (1ms< t < 8.3ms)	I ² t	10.3	A ² S
Maximum Forward Voltage at 2.0A and 25°C	V _F	1.3	V
Maximum DC Reverse Current @T _A =25 °C at Rated DC Blocking Voltage @T _A =100 °C	I _R	5 100	μA
Typical Junction Capacitance (Note1)	C _j	22	pF
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150	°C
Typical thermal resistance (Note 2)	R _{θJ-C}	45	°C/W

Note: 1. Measured at 1MHz and applied reverse voltage of 4 VDC.

2. Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B with 3mm*3mm copper pad areas.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

Fig.1 Forward Current Derating Curve

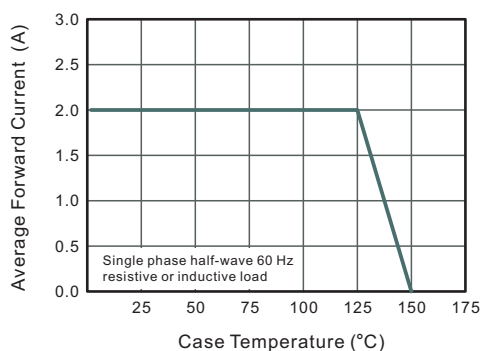


Fig.2 Typical Reverse Characteristics

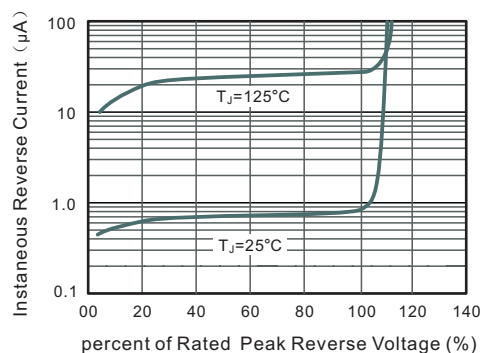


Fig.3 Typical Instantaneous Forward Characteristics

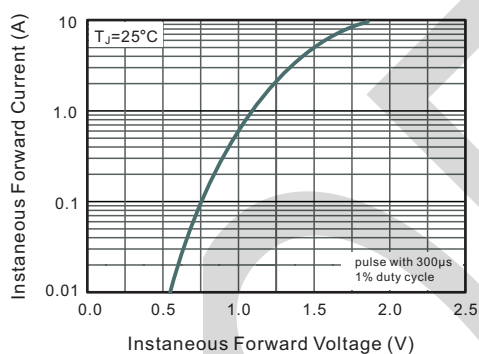


Fig.4 Typical Junction Capacitance

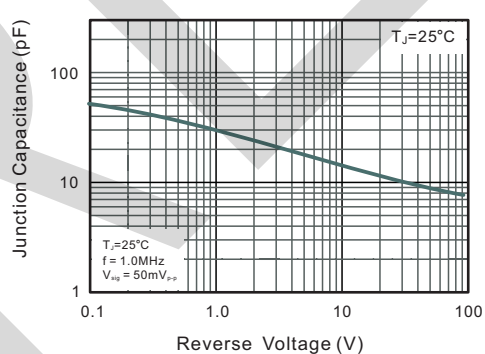
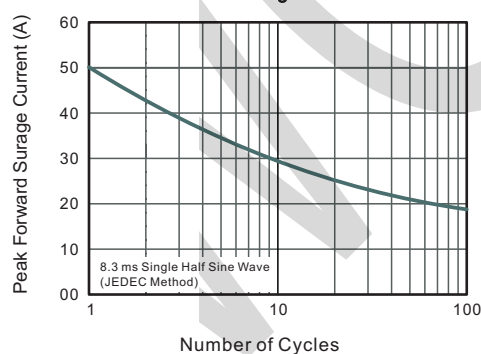
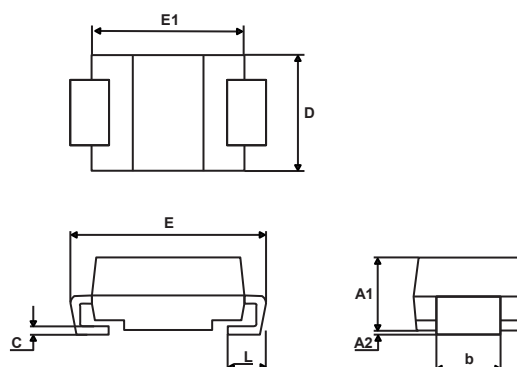


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE DIMENSIONS

SMB dimension definitions



SMB dimension values

Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A1	1.90	2.45	0.075	0.096
A2	0.05	0.20	0.002	0.008
b	1.95	2.20	0.077	0.087
c	0.15	0.40	0.006	0.016
D	3.30	3.95	0.130	0.156
E	5.10	5.60	0.201	0.220
E1	4.05	4.60	0.159	0.181
L	0.75	1.50	0.030	0.059