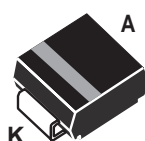


Surface Mount General Purpos Silicon Rectifiers Reverse

S2JB

SMB



Cathode  **Anode**

Marking:S2J

Features

- For surface mounted applications.
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives.

Mechanical Data

- Package: SMB
- 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	S2JB	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	600	V
Maximum RMS voltage	V _{RMS}	420	V
Maximum DC Blocking Voltage	V _{DC}	600	V
Maximum Average Forward Rectified Current	I _(AV)	2.0	A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	70	A
I ² t rating for fusing (1ms< t < 8.3ms)	I ² t	20.3	A ² S
Maximum Forward Voltage at 2.0A and 25°C	V _F	1.0	V
Maximum DC Reverse Current @T _A =25 °C at Rated DC Blocking Voltage @T _A =125 °C	I _R	5 100	μA
Typical Junction Capacitance (Note1)	C _j	15	pF
Operating and Storage Temperature Range	T _j , T _{stg}	-50 ~ +150	°C
Typical Thermal Resistance(2)	R _{θJA}	65	°C/W
	R _{θJC}	16	°C/W

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

2. Valid provided that electrodes are kept at ambient temperature.

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

Fig.1 Forward Current Derating Curve

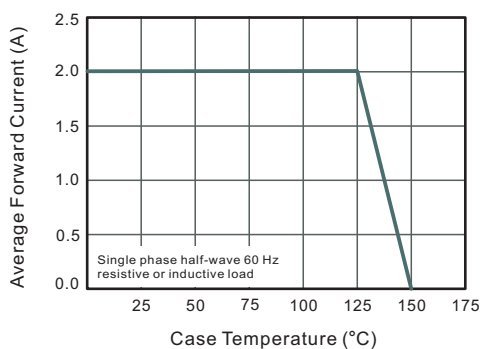


Fig.2 Typical Reverse Characteristics

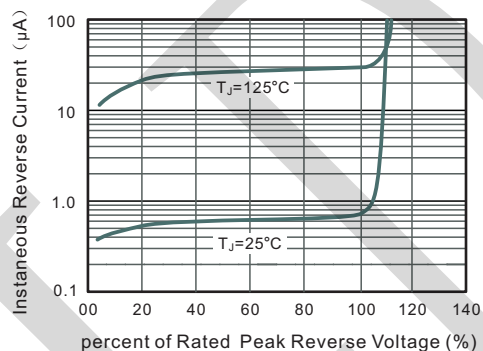


Fig.3 Typical Forward Characteristic

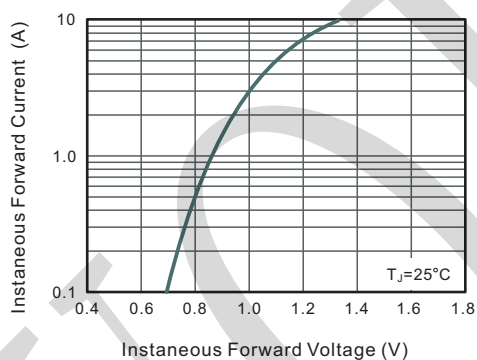


Fig.4 Typical Junction Capacitance

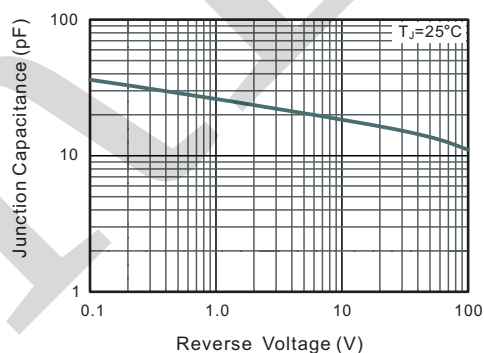
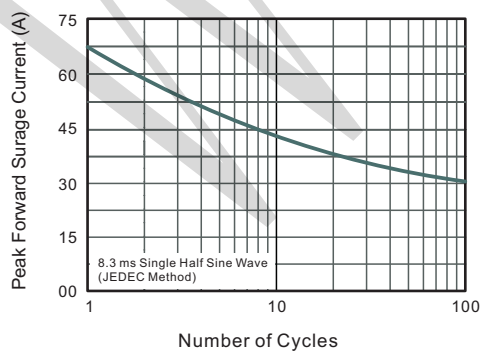
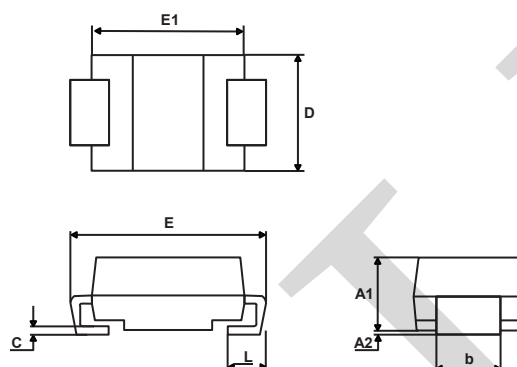


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



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