

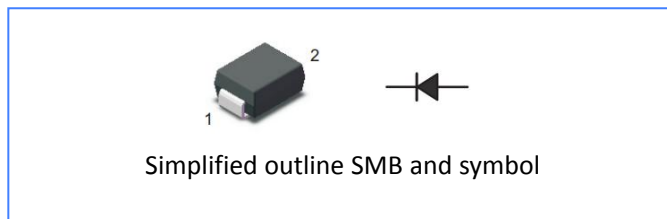
RS2AB THRU RS2MB

Features

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

Mechanical Data

- Case:SMB
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.091g / 0.003oz



Pinning

PIN	DESCRIPTION
1	Cathode
2	Anode

Absolute Maximum Ratings And Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	RS2AB	RS2BB	RS2DB	RS2GB	RS2JB	RS2KB	RS2MB	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Tc = 125 °C	I _{F(AV)}	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I _{FSM}	60							A
Maximum Forward Voltage at 1 A	V _F	1.3							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I _R	5 100							μ A
Typical Junction Capacitance at VR=4V f=1M	C _j	28							pF
Maximum Reverse Recovery Time ⁽¹⁾	t _{rr}	150				250	500		ns
Typical Thermal Resistance ⁽²⁾	R _{θJA}	60							°C/W
	R _{θJC}	20							
Operating and Storage Temperature Range	T _J , T _{stg}	-55 ~ +150							°C

(1) Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$

(2) .P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Rating And Characteristic Curves

Fig.1 Forward Current Derating Curve

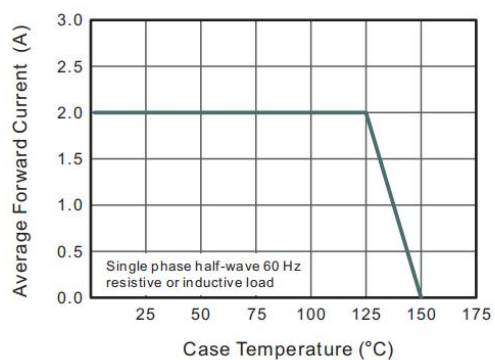


Fig.2 Typical Reverse Characteristics

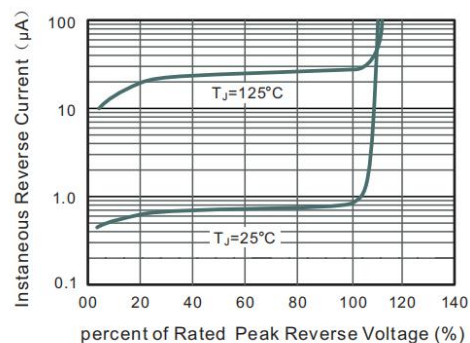


Fig.3 Typical Instantaneous Forward Characteristics

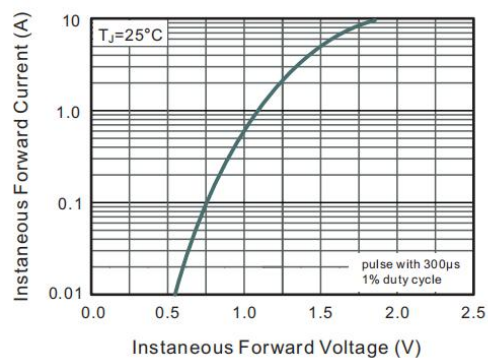


Fig.4 Typical Junction Capacitance

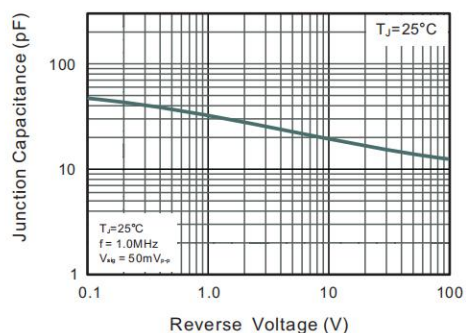
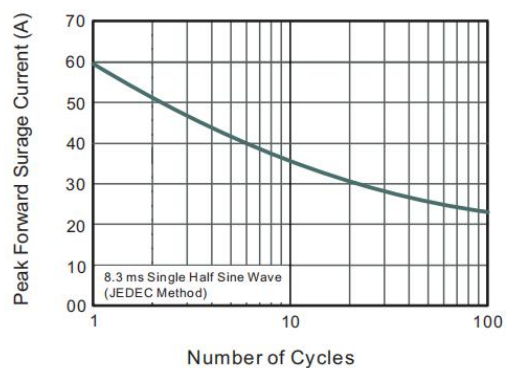


Fig.5 Maximum Non-Repetitive Peak

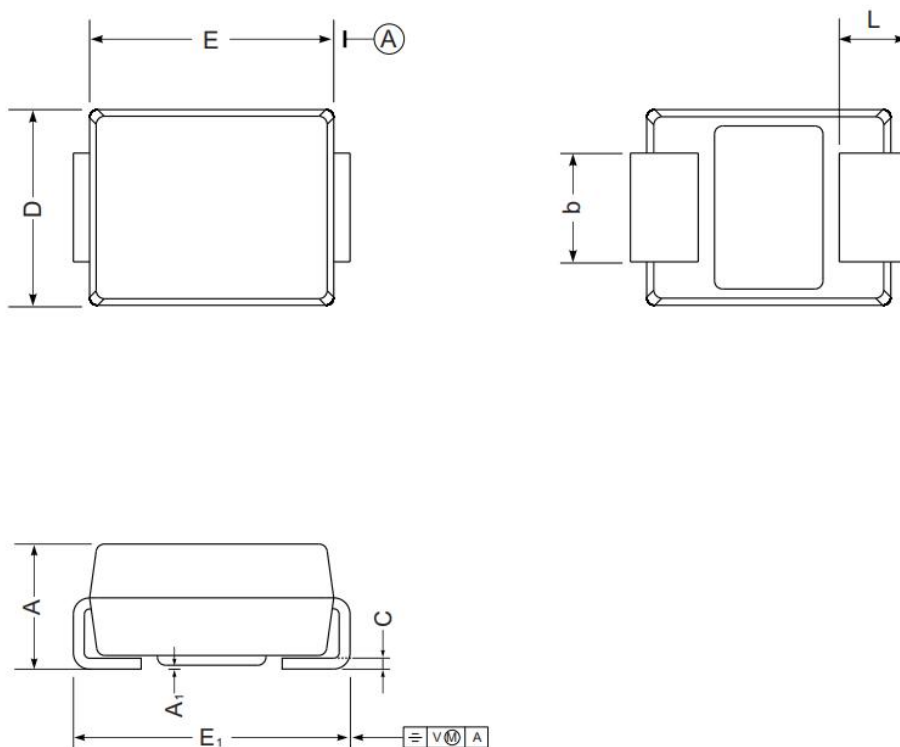
Forward Surge Current



Package Outline

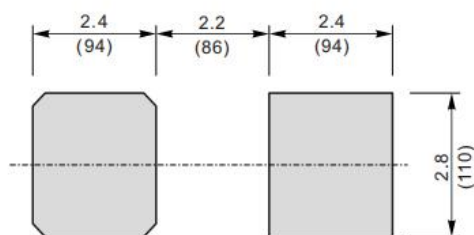
Plastic surface mounted package; 2 leads

SMB



UNIT		A	C	D	E	E ₁	A ₁	L	b
mm	max	2.44	0.305	3.94	4.7	5.59	0.2	1.5	2.2
	min	2.13	0.152	3.3	4.06	5.08	0.05	0.8	1.9
mil	max	96	12	155	185	220	7.9	59	87
	min	84	6	130	160	200	2.0	32	75

The recommended mounting pad size



Unit : $\frac{\text{mm}}{(\text{mil})}$