

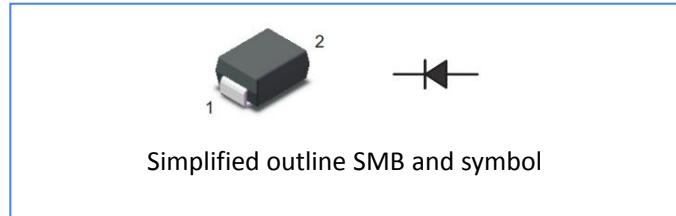
RS3AB THRU RS3MB

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: 0.098g / 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	RS3AB	RS3BB	RS3DB	RS3GB	RS3JB	RS3KB	RS3MB	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 $T_c = 125^\circ C$	$I_{F(AV)}$				3				A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}				90				A
Maximum Forward Voltage at 1 A	V_F				1.3				V
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Blocking Voltage $T_a = 125^\circ C$	I_R				5				μA
Typical Junction Capacitance at $VR=4V f=1M$	C_j				40				pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}		150			250		500	ns
Typical Thermal Resistance ⁽²⁾	$R_{θJA}$ $R_{θJC}$				48				$^\circ C/W$
Operating and Storage Temperature Range	T_j, T_{stg}				-55 ~ +150				$^\circ C$

(1) Measured with $IF = 0.5 A$, $IR = 1 A$, $Irr = 0.25 A$

(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

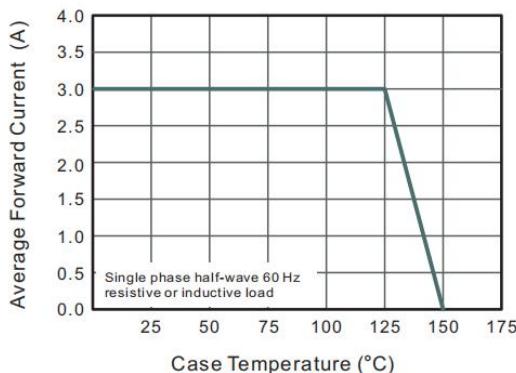


Fig.2 Typical Reverse Characteristics

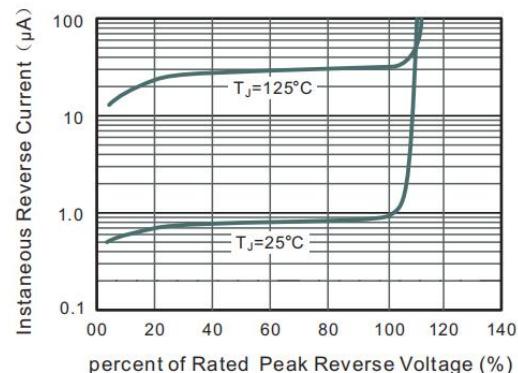


Fig.3 Typical Instantaneous Forward Characteristics

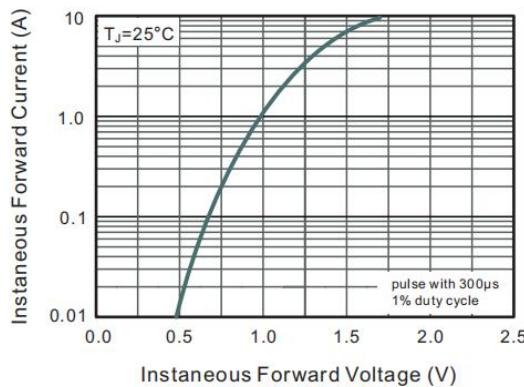


Fig.4 Typical Junction Capacitance

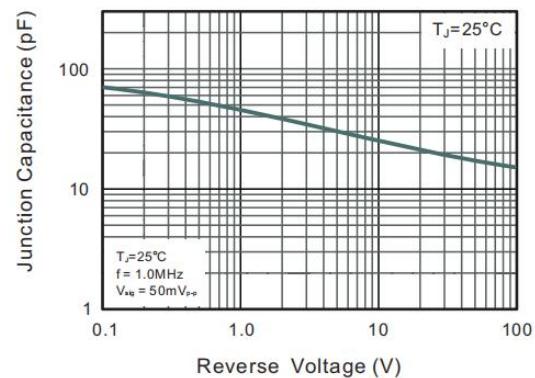
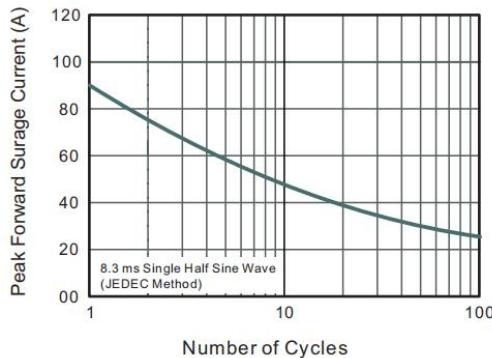


Fig.5 Maximum Non-Repetitive Peak

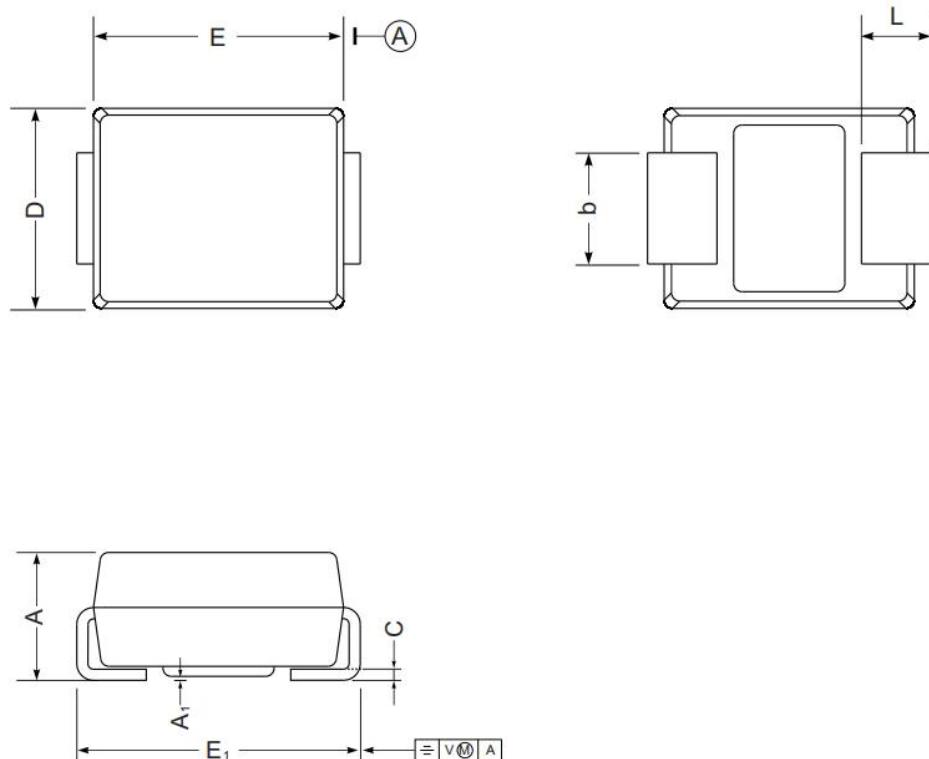
Forward Surge Current



Package Outline

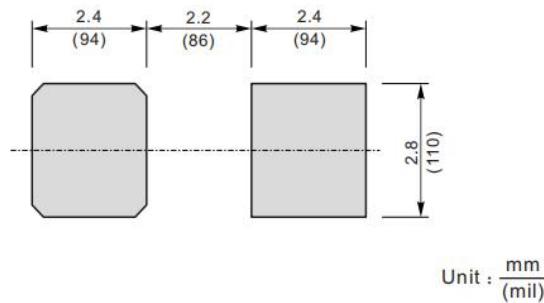
Plastic surface mounted package; 2 leads

SMB



UNIT		A	C	D	E	E ₁	L	A ₁	b
mm	max	2.44	0.305	3.94	4.70	5.59	1.5	0.20	2.2
	min	2.13	0.152	3.3	4.06	5.08	0.8	0.05	1.9
mil	max	96	12	155	185	220	59	7.9	87
	min	84	6	130	160	200	32	2.0	75

The recommended mounting pad size


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