

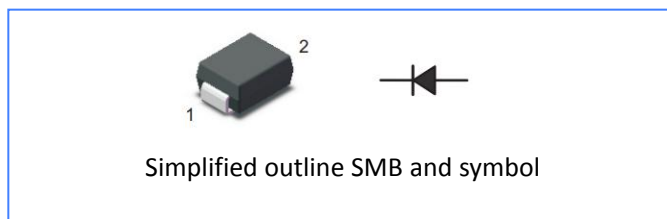
ES2AB THRU ES2JB

Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Superfast 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: 0.095g / 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%.

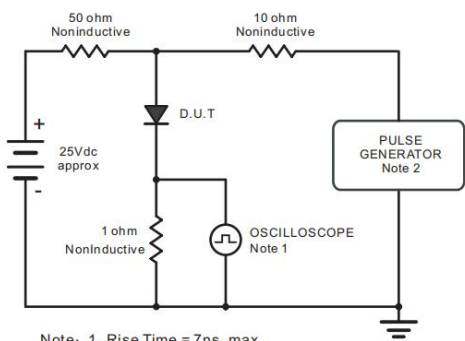
Parameter	Symbols	ES2AB	ES2BB	ES2CB	ES2DB	ES2EB	ES2GB	ES2JB	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	60							A
Maximum Forward Voltage at 1 A	V_F	1.0				1.25		1.68	V
Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Blocking Voltage $T_a = 125^\circ C$	I_R	5 100							μA
Typical Junction Capacitance at $V_R=4V, f=1MHz$	C_j	40							pF
Maximum Reverse Recovery Time ⁽¹⁾	t_{rr}	35							ns
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	60							$^\circ C/W$
	$R_{\theta JC}$	20							
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							$^\circ C$

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

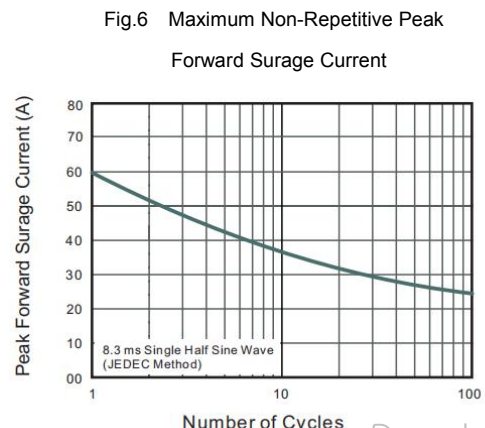
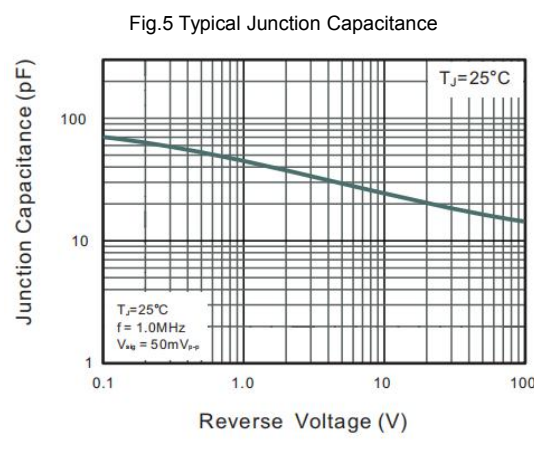
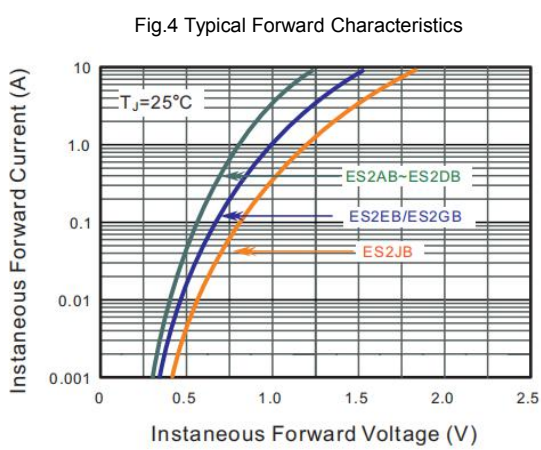
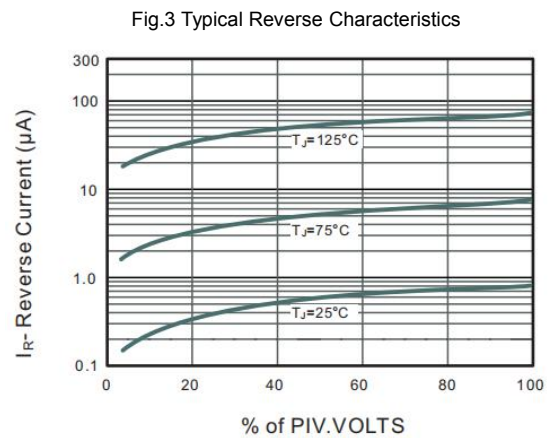
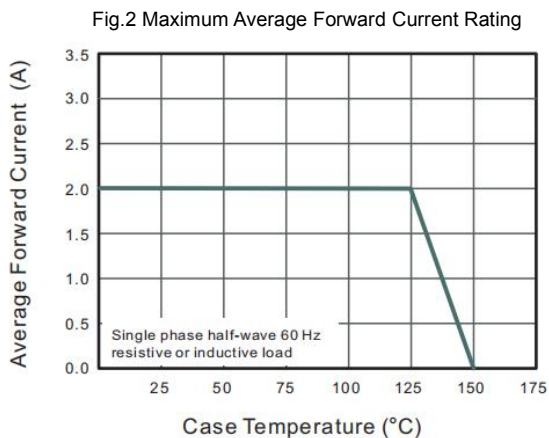
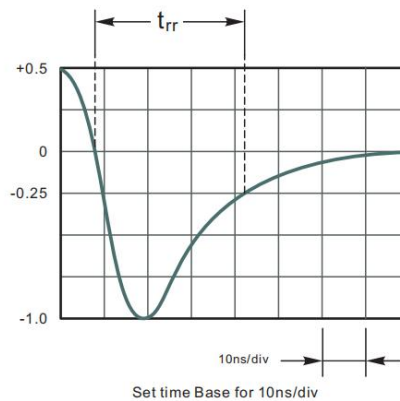
(2) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas

Rating And Characteristic Curves

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



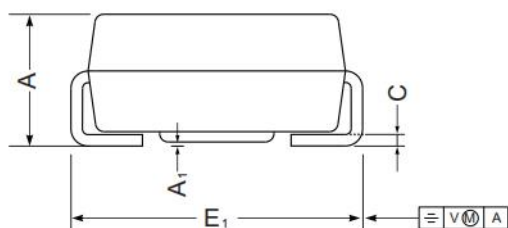
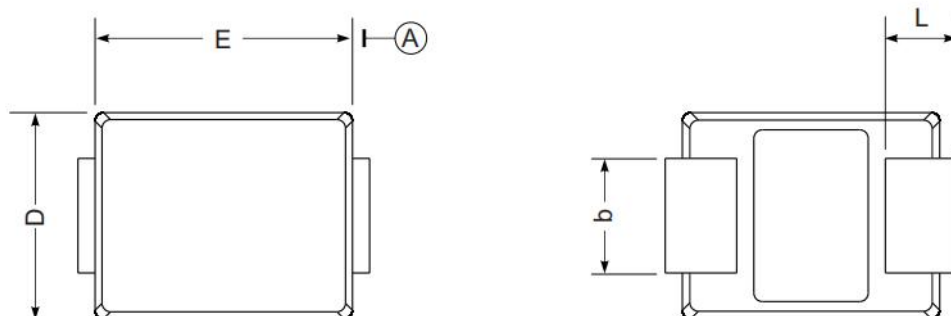
Note: 1. Rise Time = 7ns, max.
Input Impedance = 1 megohm, 22pF.
2. Rises Time = 10ns, max.
Source Impedance = 50 ohms.



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	0.20	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 : $\frac{\text{mm}}{\text{mil}}$