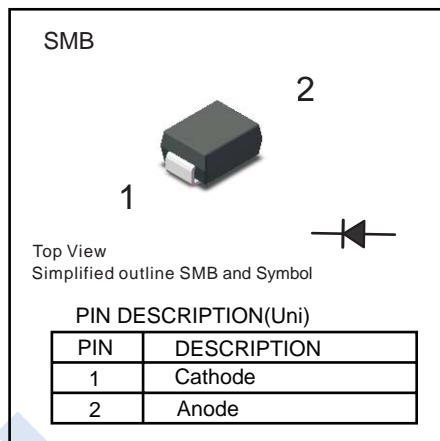


Super-Fast Recovery Rectifier

ES2A ~ ES2J

■ Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Superfast reverse recovery time



■ 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	Symbol	ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J	Unit	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V	
Maximum RMS voltage	V_{RSM}	35	70	105	140	210	280	420		
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600		
Maximum Forward Voltage at 2 A	V_F	1			1.25		1.68		A	
Maximum Average Forward Rectified Current at $T_c = 125^\circ\text{C}$	$I_{F(AV)}$	2								
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	60								
Maximum DC Reverse Current at rated DC blocking voltage	I_R	$T_a=25^\circ\text{C}$		5		$T_a=125^\circ\text{C}$		100		μA
Typical Junction Capacitance	C_j	*1		40						pF
Maximum Reverse Recovery Time	t_{rr}	*2		35						ns
Typical thermal resistance	$R_{\theta JA}$	*3		60						$^\circ\text{C/W}$
	$R_{\theta JC}$			20						
Junction Temperature	T_j			150						$^\circ\text{C}$
Storage Temperature	T_{stg}			-55 to 150						

* 1 Measured at 1MHz and applied reverse voltage of 4V D.C.

* 2 Measured with $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $t_{rr} = 0.25\text{A}$.

* 3. P.C.B. mounted with 1.0 X 1.0" (2.54 X 2.54 cm) copper pad areas.

■ Marking

NO.	ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J
Marking	ES2A	ES2B	ES2C	ES2D	ES2E	ES2G	ES2J

Super-Fast Recovery Rectifier

ES2A ~ ES2J

■ Typical Characteristics

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram

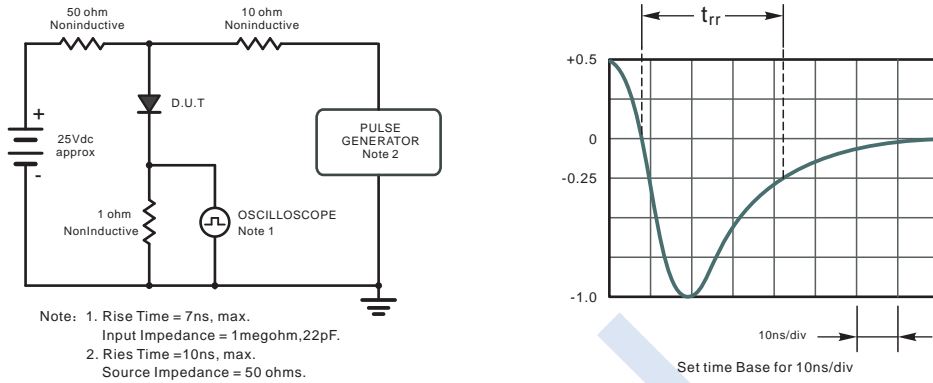


Fig.2 Maximum Average Forward Current Rating

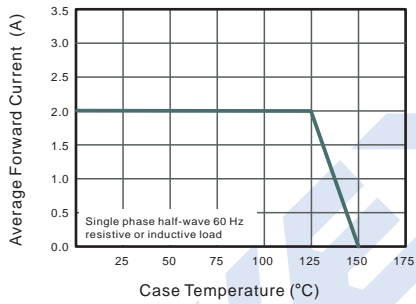


Fig.3 Typical Reverse Characteristics

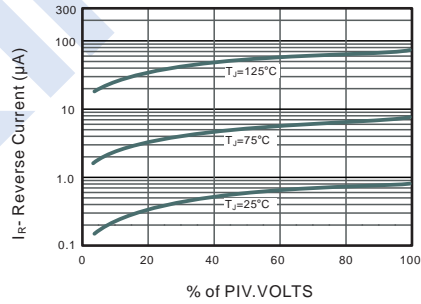


Fig.4 Typical Forward Characteristics

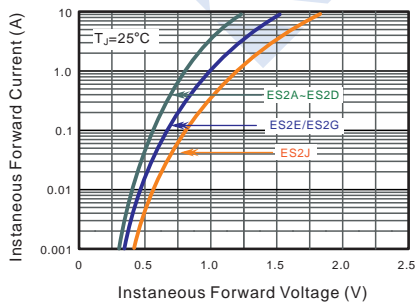


Fig.5 Typical Junction Capacitance

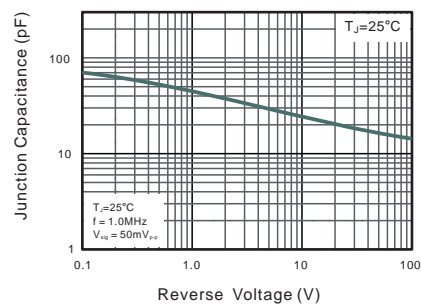
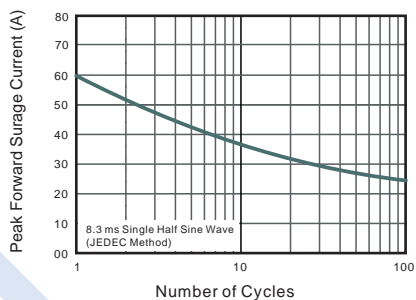


Fig.6 Maximum Non-Repetitive Peak Forward Surge Current



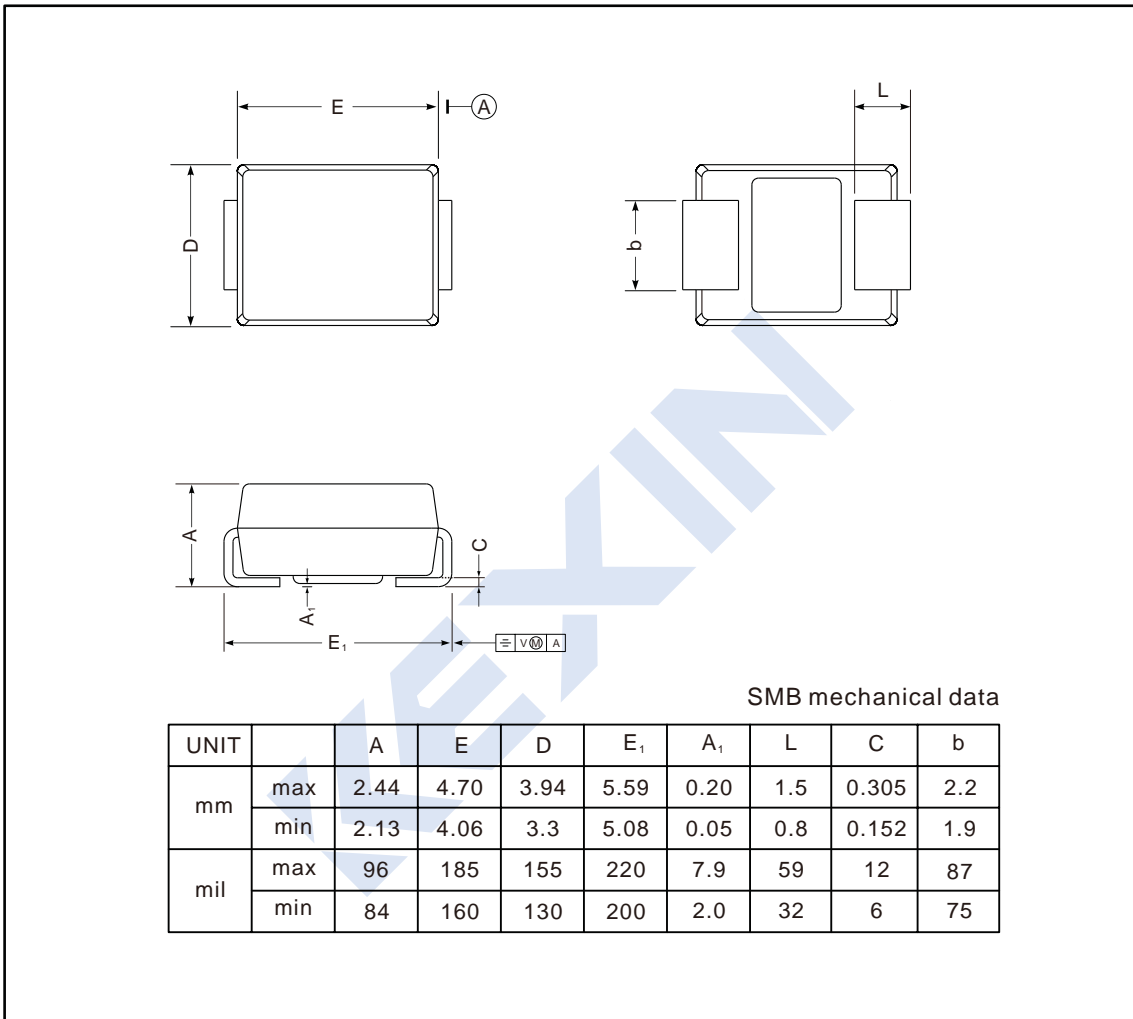
Super-Fast Recovery Rectifier

ES2A ~ ES2J

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SMB



■ The Recommended Mounting Pad Size

