



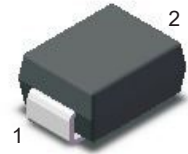
# ES2AB-PJ~ES2JB-PJ

## Surface Mount Superfast Recovery Rectifiers

### Features

- Glass Passivated Chip Junction
- For Surface Mounted Applications
- Low profile package
- Superfast reverse recovery time

### SMB



1.Cathode  2.Anode

### Marking Code:

ES2AB-PJ: ES2A  
ES2BB-PJ: ES2B  
ES2CB-PJ: ES2C  
ES2DB-PJ: ES2D  
ES2EB-PJ: ES2E  
ES2GB-PJ: ES2G  
ES2JB-PJ: ES2J

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	ES2AB-PJ	ES2BB-PJ	ES2CB-PJ	ES2DB-PJ	ES2EB-PJ	ES2GB-PJ	ES2JB-PJ	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 at $T_C = 125^\circ\text{C}$	$I_{F(AV)}$	2.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	$I_{FSM}$	60							A
Maximum Instantaneous Forward Voltage at 2 A	$V_F$	1.0				1.25		1.68	V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_R$					5 100			$\mu\text{A}$
Typical Junction Capacitance <sup>Note1</sup>	$C_j$					40			pF
Typical Thermal Resistance <sup>Note2</sup>	$R_{\theta JA}$					60			$^\circ\text{C/W}$
Maximum Reverse Recovery Time <sup>Note3</sup>	$T_{rr}$					35			nS
Junction Temperature	$T_J$					150			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$					-55 to +150			$^\circ\text{C}$

### Note:

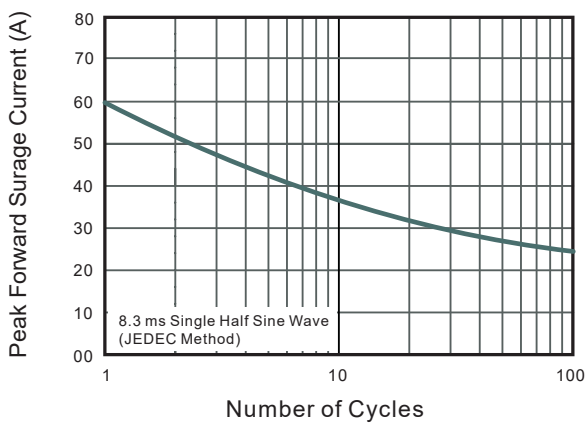
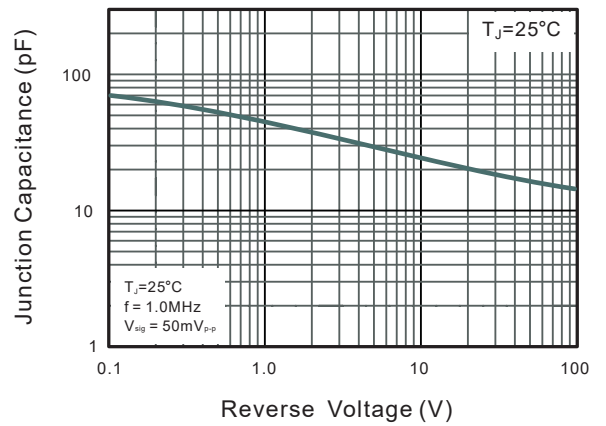
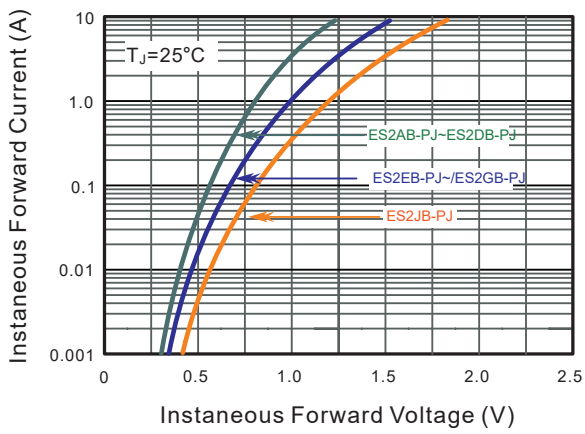
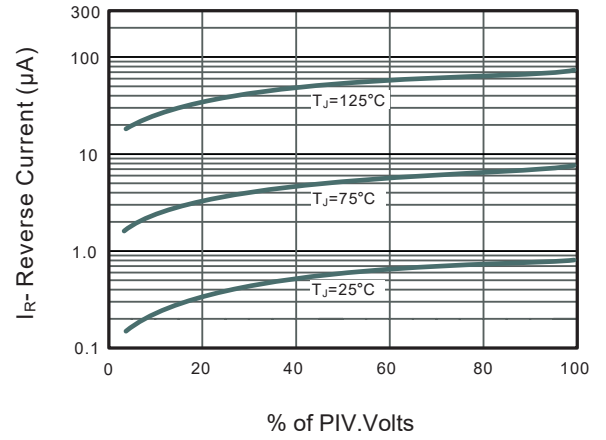
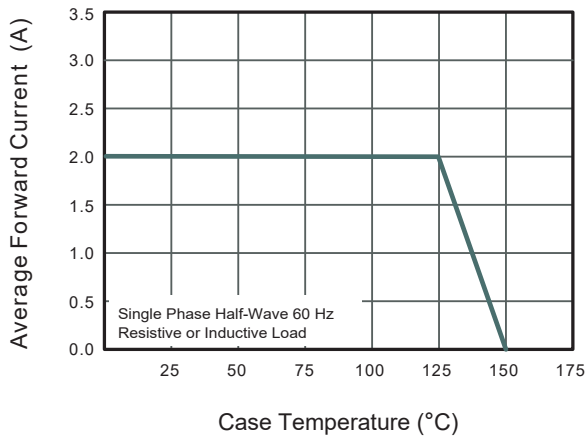
1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.
3. Measured with  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .



# ES2AB-PJ~ES2JB-PJ

## Surface Mount Superfast Recovery Rectifiers

### Typical Characteristic Curves





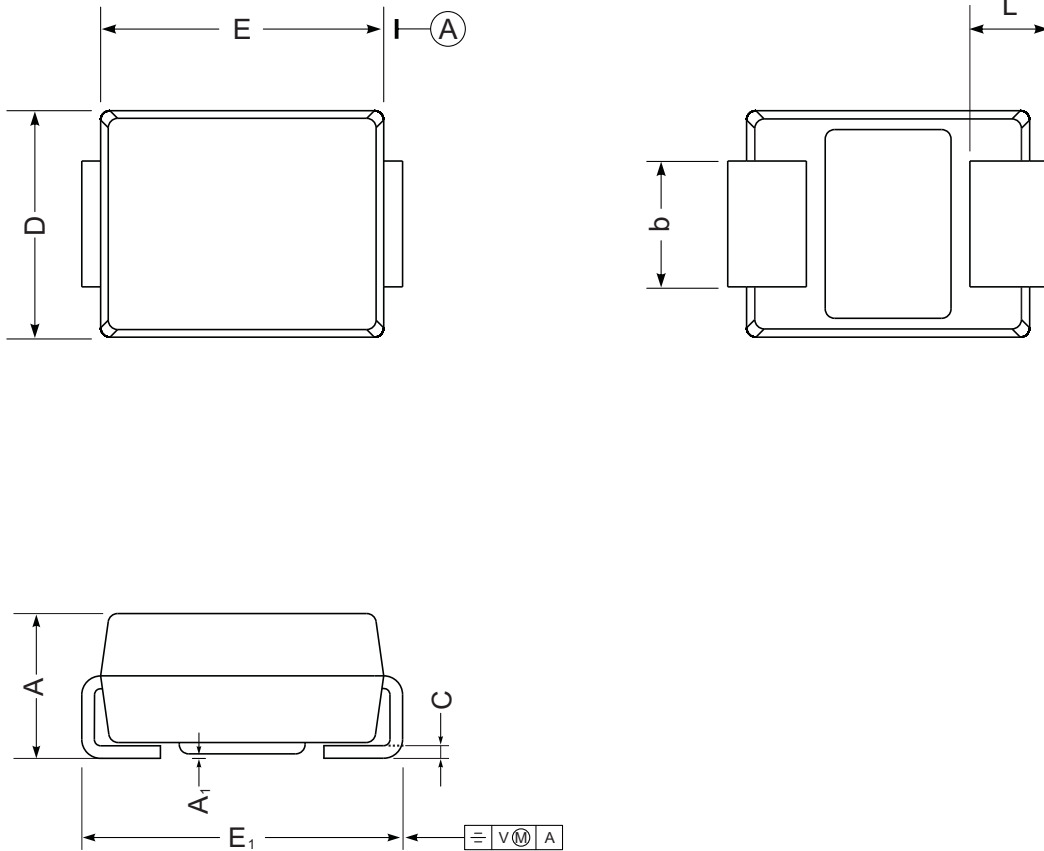
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## Surface Mount Superfast Recovery Rectifiers

### Package Outline

SMB

Dimensions in mm



UNIT		A	E	D	E1	A1	L	C	b
mm	max	2.44	4.70	3.94	5.59	0.20	1.5	0.305	2.2
	min	2.13	4.06	3.3	5.08	0.05	0.8	0.152	1.9
mil	max	96	185	155	220	7.9	59	12	87
	min	84	160	130	200	2.0	32	6	75