

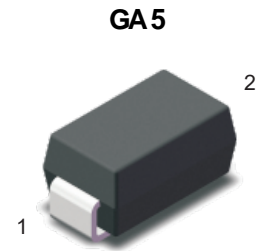


ES2A-PJ~ES2J-PJ

Surface Mount Superfast Recovery Rectifiers

Features

- For surface mount applications
- Glass passivated chip junction
- Superfast reverse recovery time



1.Cathode 2.Anode

Marking Code:

ES2A-PJ: ES2A
 ES2B-PJ: ES2B
 ES2C-PJ: ES2C
 ES2D-PJ: ES2D
 ES2E-PJ: ES2E
 ES2G-PJ: ES2G
 ES2J-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	ES2A-PJ	ES2B-PJ	ES2C-PJ	ES2D-PJ	ES2E-PJ	ES2G-PJ	ES2J-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}	50							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				μA
Typical Junction Capacitance ^{Note1}	C_j	40								pF
Typical Thermal Resistance ^{Note2}	$R_{\theta JA}$	60								$^\circ\text{C/W}$
Maximum Reverse Recovery Time ^{Note3}	T_{rr}	35								nS
Junction Temperature	T_J	150							$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$	

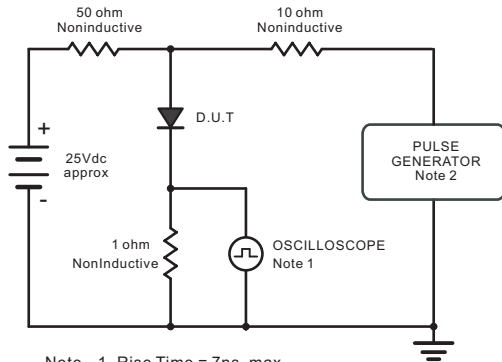
Note:

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 1.0" X 1.0" (2.54 X 2.54 cm) copper pad areas.
3. Measured with $I_F = 0.5\text{ A}$, $I_R = 1\text{ A}$, $I_{rr} = 0.25\text{ A}$

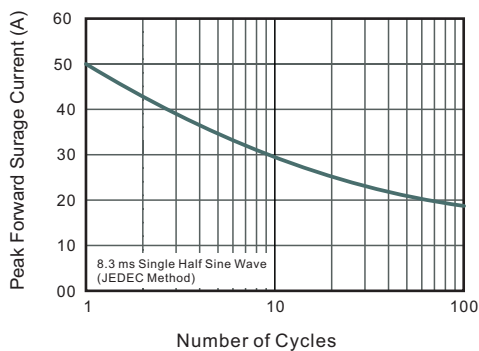
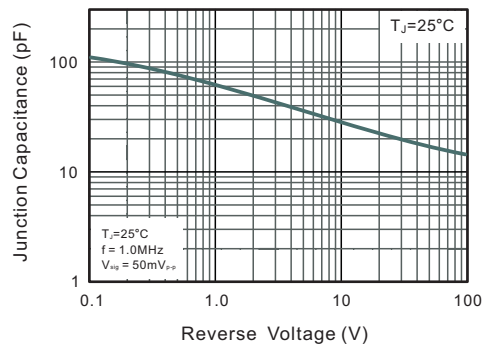
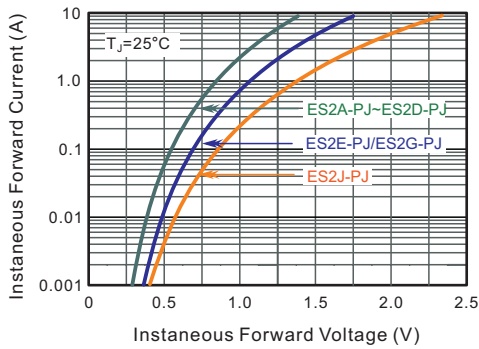
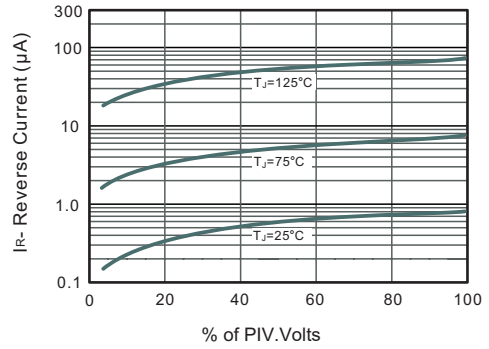
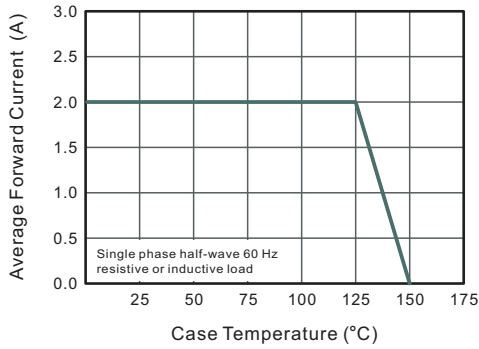
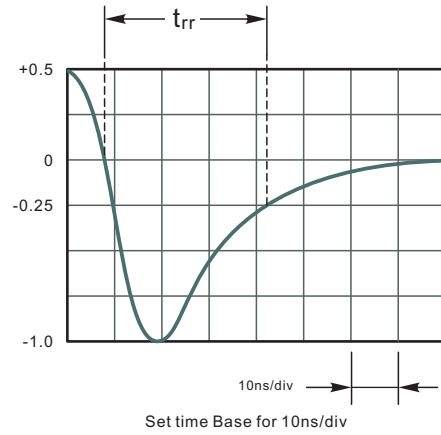


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Typical Characteristic Curves



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





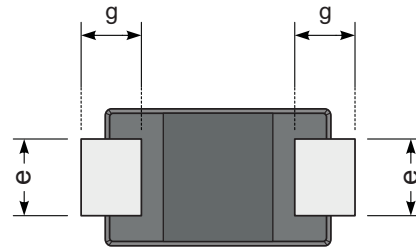
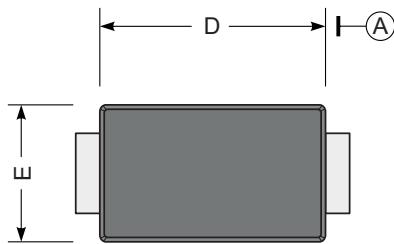
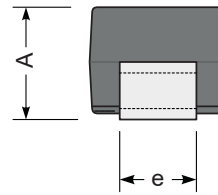
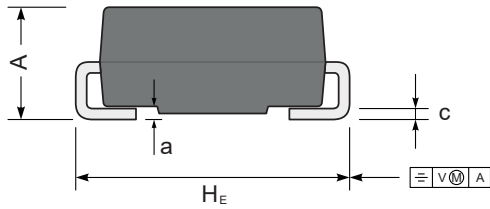
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Package Outline

SMA

Dimensions in mm



UNIT		A	D	E	H _E	c	e	g	a
mm	max	2.2	4.5	2.7	5.2	0.31	1.6	1.5	0.3
	min	1.9	4.0	2.3	4.7	0.15	1.3	0.9	
mil	max	87	181	106	205	12	63	59	12
	min	75	157	91	185	6	51	35	