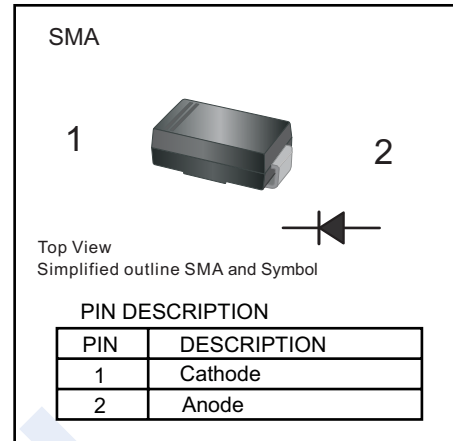# Fast Recovery Diodes
ES1A ~ ES1J

■ Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super-Fast Recovery Time

SMA

1   2

Top View
Simplified outline SMA and Symbol

PIN DESCRIPTION

PIN	DESCRIPTION
1	Cathode
2	Anode

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V
Working Peak Reverse Voltage	V_{RWM}								
Maximum DC Blocking Voltage	V_{DC}								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	
Forward Voltage @ I_F=1A	V_F	0.95				1.25		1.7	
Average Rectified Output Current T_L=120℃	I_O	1							A
Peak Forward Surge Current @ 8.3ms	I_{FSM}	30							
Maximum DC Reverse Current Ta=25℃	I_R	5							μA
Ta=100℃		500							
Reverse Recovery Time (Note.1)	t_{rr}	35							ns
Typical Junction Capacitance (Note.2)	C_j	10							pF
Thermal Resistance.Junction- to-Lead	R_{thJL}	35							℃/W
Junction Temperature	T_j	150							℃
Storage Temperature	T_{stg}	-65 to 150							

Note.1: Measured with I_F= 0.5A, I_R = 1A, I_{rr} = 0.25A. See figure 5.
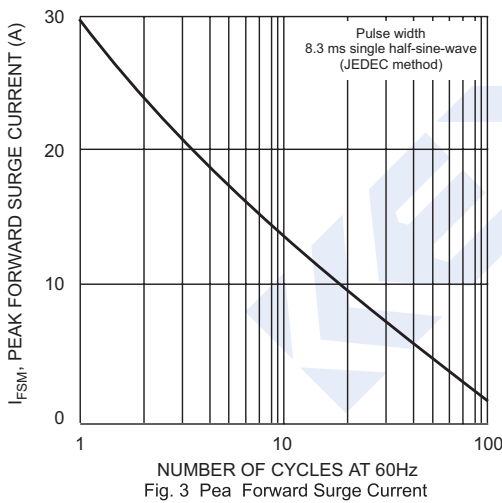
Note.2: Measured at 1 MHz and Applied V_R=4V

■ Marking

NO.	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J
Marking	ES1A	ES1B	ES1C	ES1D	ES1E	ES1G	ES1J

Fast Recovery Diodes

ES1A ~ ES1J

■ Typical Characterisitics

Fig. 1 Forward Current Derating Curve

Fig. 2 Typical Forward Characteristics

Fig. 3 Pea Forward Surge Current

Fig. 4 Typical Junction Capacitance
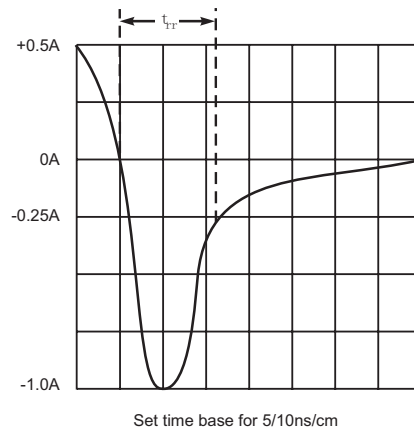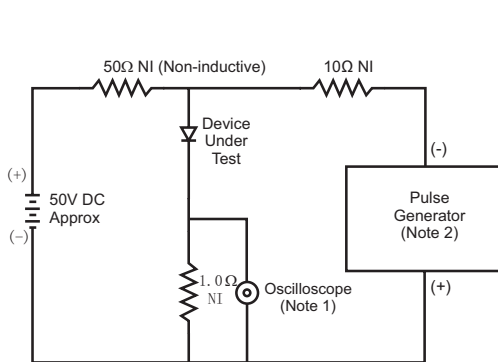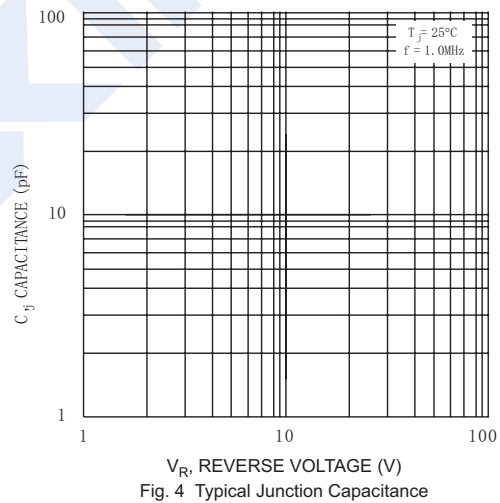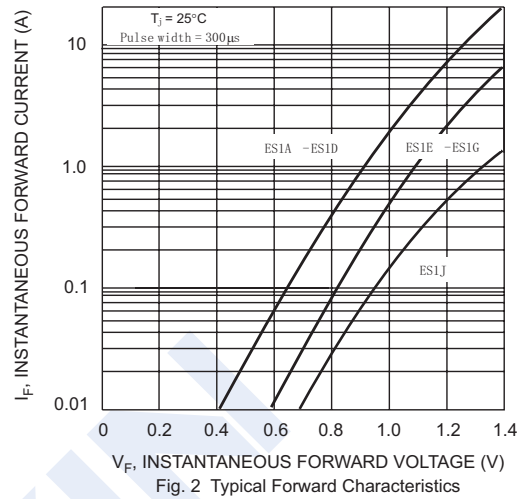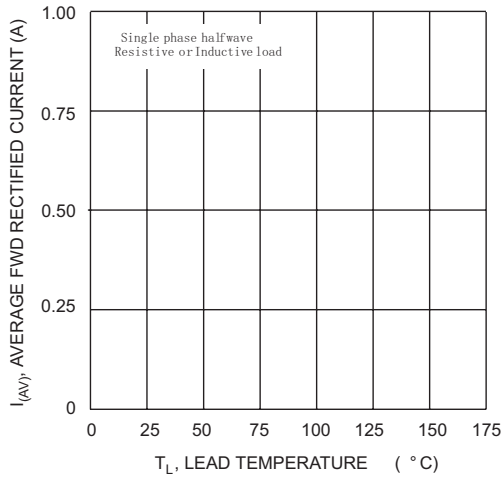
Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
2. Rise Time = 10ns max. Input Impedance = 50Ω.

Fig. 5 Reverse Recovery Time Characteristic and Test Circuit
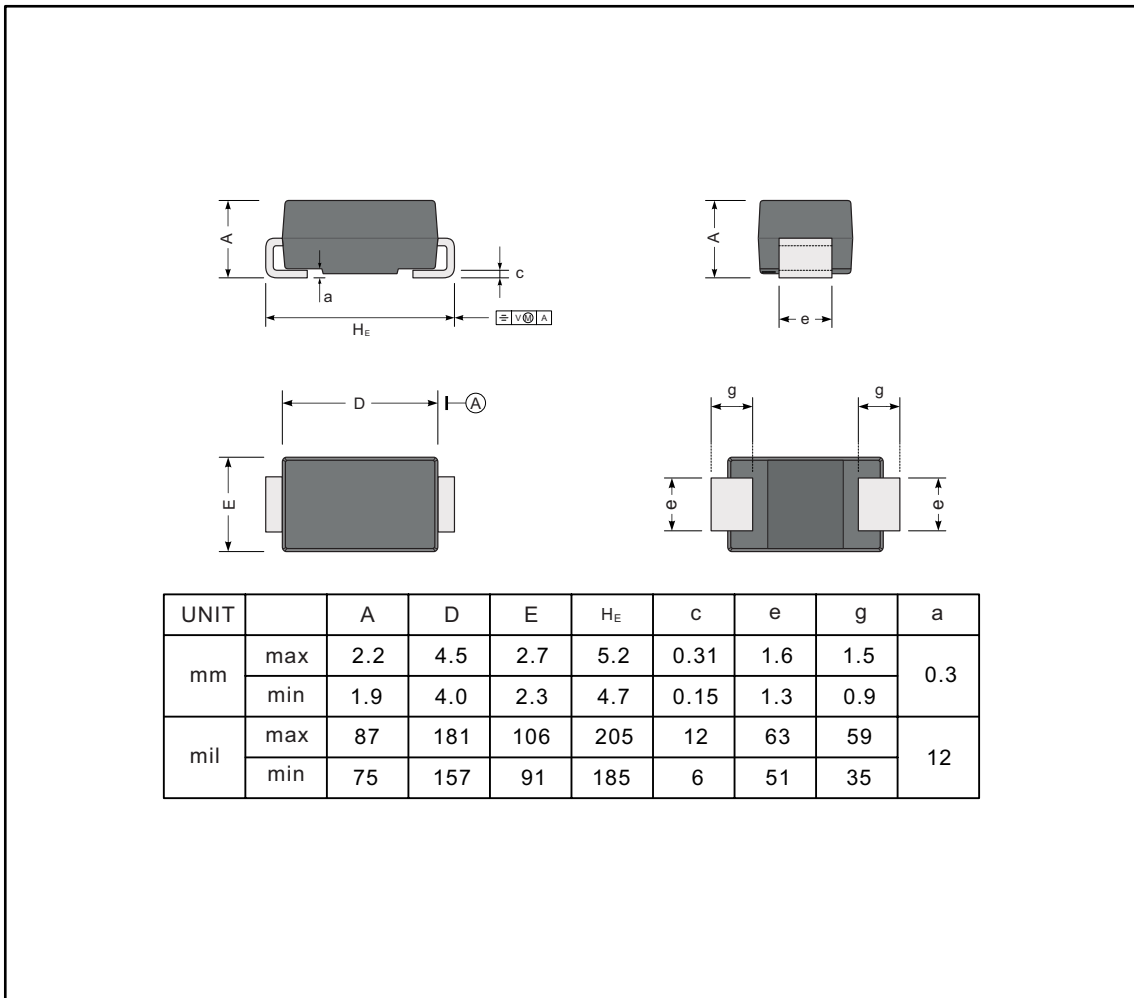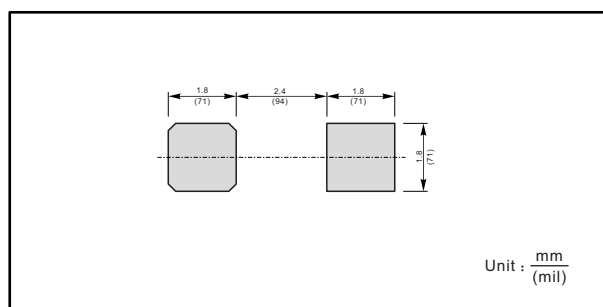
KEXIN

Fast Recovery Diodes

ES1A ~ ES1J

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads   SMA

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	

■ The recommended mounting pad size

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Rectifiers *category:*

Click to view products by KEXIN *manufacturer:*

Other Similar products are found below :

D91A DA24F4100L DD89N1600K-A DD89N16K-K RL252-TP DLA11C-TR-E DSA17G 1N4005-TR BAV199-TP UFS120Je3/TR13 JANS1N6640US VS-80-1293 DD89N16K DD89N16K-A 481235F DSP10G-TR-E 067907F MS306 ND104N08K SPA2003-B-D-A01 VS-80-6193 VS-66-9903 VGF0136AB US2JFL-TP UFS105Je3/TR13 A1N5404G-G ACGRA4007-HF ACGRB207-HF RF301B2STL RF501B2STL UES1306 UES1302 BAV199E6433HTMA1 ACGRC307-HF ACEFC304-HF JANTXV1N5660A UES1106 GS2K-LTP D126A45C D251N08B SCHJ22.5K SM100 SCPA2 SCH10000 SDHD5K STTH20P035FP VS-8EWS12S-M3 VS-12FL100S10 ACGRA4001-HF MUR420GP-TP