

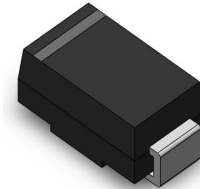
## Effective Super Fast Recovery Diodes

**ES2AA~ES2JA**
**2A**
**50 to 600V**
**DO-214AC(SMA)**

### 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

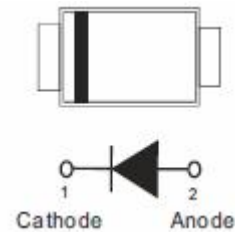
### DO-214AC(SMA)



### Mechanical Data

- ◆ Case: JEDEC DO-214AC molded plastic body.
- ◆ Terminals: Solder plated, solderable per MIL-STD-750, Method 2026.
- ◆ Polarity: Color band denotes cathode end.
- ◆ Mounting Position: Any.
- ◆ Weight : 0.002 ounce, 0.068 grams.

### Functional Diagram



### Absolute Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

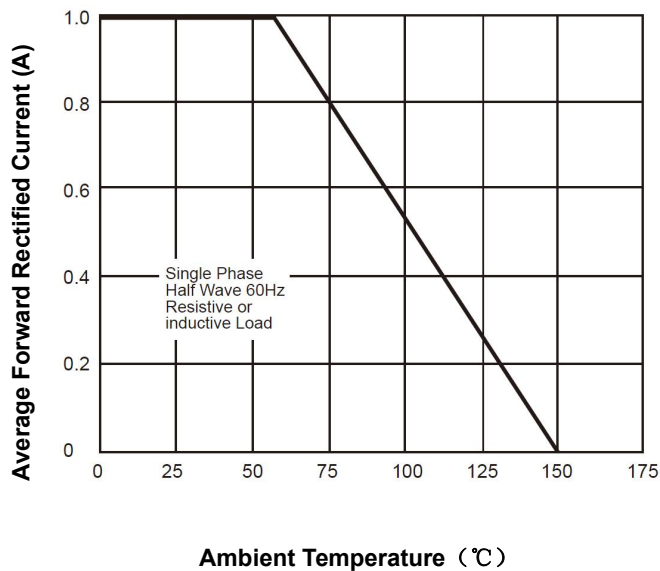
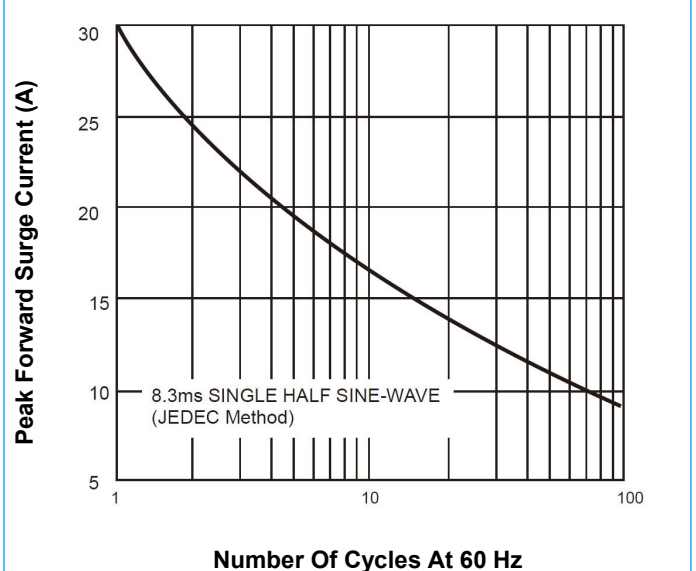
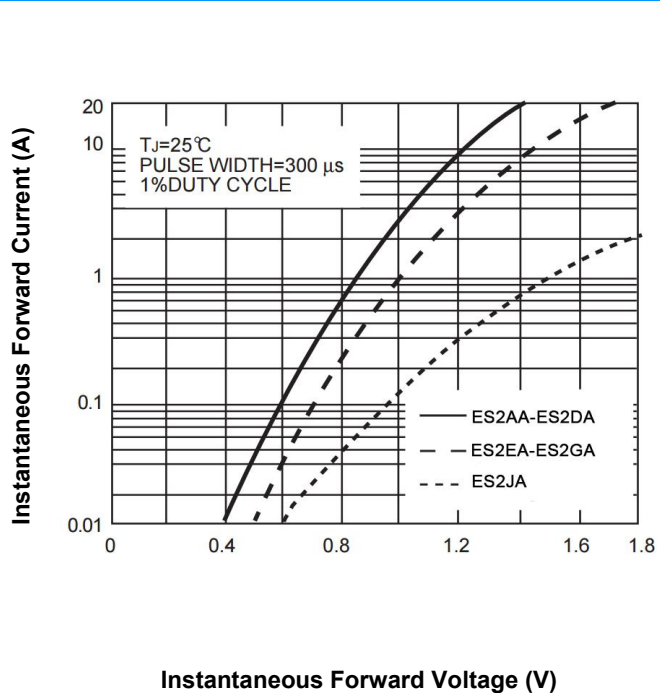
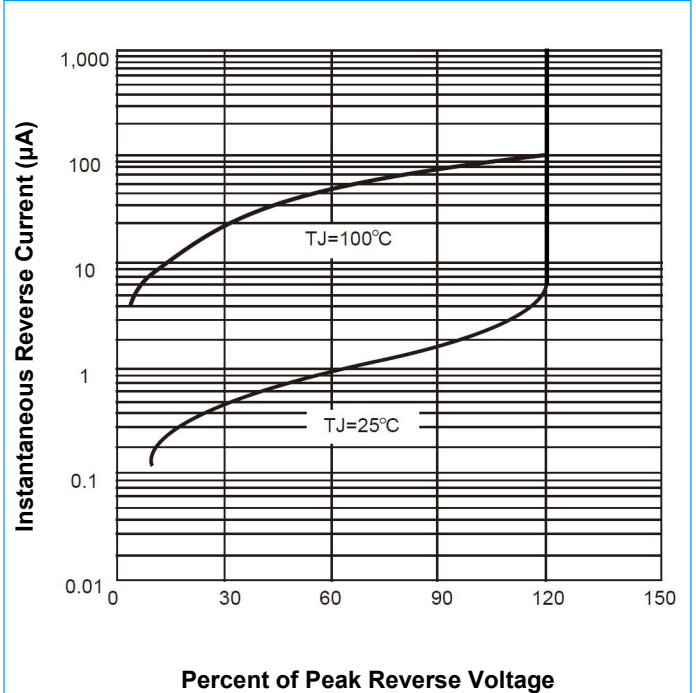
For capacitive load, derate current by 20%.

Parameter		Symbol	ES2AA	ES2BA	ES2CA	ES2DA	ES2EA	ES2GA	ES2JA	Unit
Maximum Repetitive Peak Reverse Voltage		<b>V<sub>RRM</sub></b>	50	100	150	200	300	400	600	V
Maximum RMS Voltage		<b>V<sub>RMS</sub></b>	35	70	105	140	210	280	420	V
Maximum DC Blocking Voltage		<b>V<sub>DC</sub></b>	50	100	150	200	300	400	600	V
Maximum Average Forward Current at T <sub>L</sub> =100℃		<b>I<sub>F(AV)</sub></b>	2							A
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		<b>I<sub>FSM</sub></b>	50							A
Maximum Forward Voltage at 2A		<b>V<sub>F</sub></b>	1				1.25		1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>a</sub> =25℃	<b>I<sub>R</sub></b>	5							μA
	T <sub>a</sub> =125℃		100							
Typical Junction Capacitance at VR=4V, f=1MHz		<b>C<sub>J</sub></b>	60							pF
Maximum Reverse Recovery Time at IF=0.5A, IR=1A, Irr=0.25A		<b>t<sub>rr</sub></b>	35							ns
Operating and Storage Temperature Range		<b>T<sub>J</sub>, T<sub>STG</sub></b>	-55 to +150							℃

# Effective Super Fast Recovery Diodes

**ES2AA~ES2JA**
**2A**
**50 to 600V**
**DO-214AC(SMA)**

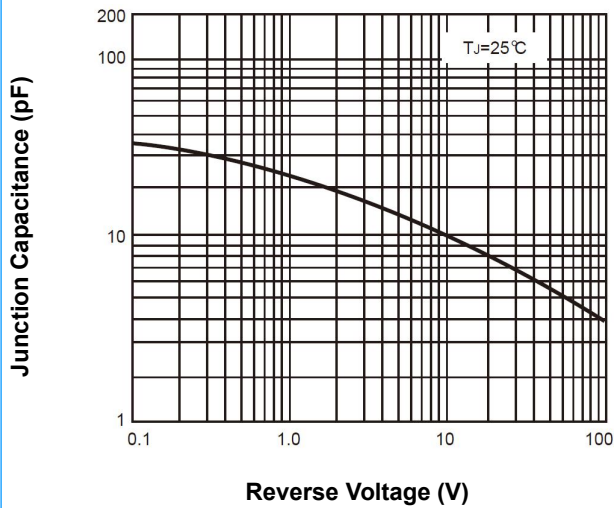
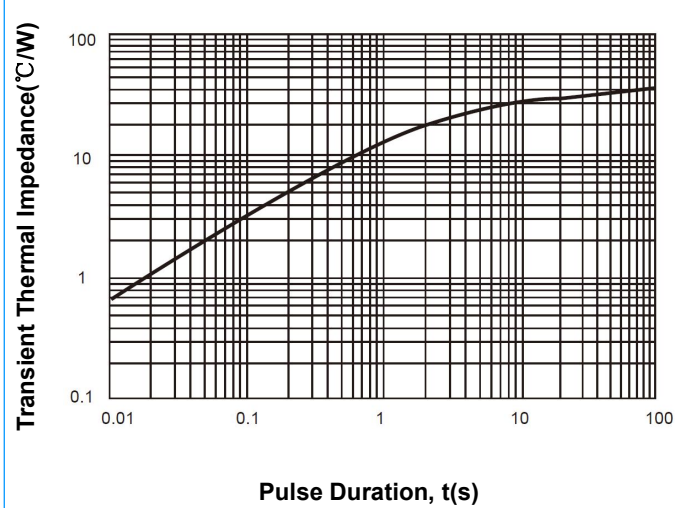
## Rating and Characteristic Curves

**Fig1. Forward Current Derating Curves**

**Fig2. Maximum Non-Repetitive Peak Forward Surge Current**

**Fig3. Typical Instantaneous Forward Characteristics**

**Fig4. Typical Reverse Characteristics**


## Effective Super Fast Recovery Diodes

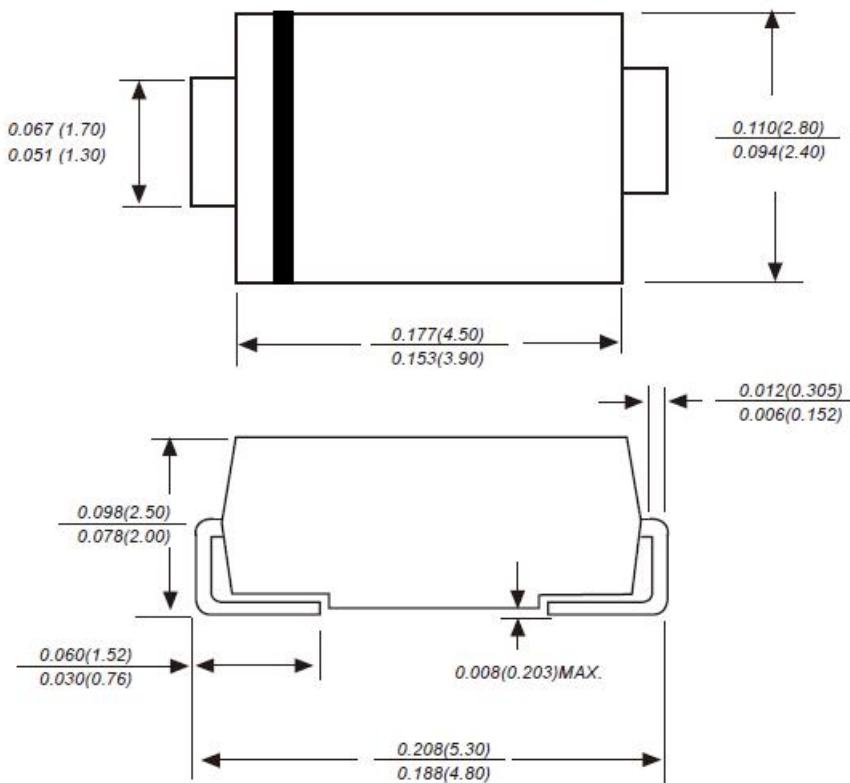
**ES2AA~ES2JA**
**2A**
**50 to 600V**
**DO-214AC(SMA)**

### Rating and Characteristic Curves (Continue)

**Fig5. Typical Junction Capacitance**

**Fig6. Typical Transient Thermal Impedance**


### Package Outline (Unit: inch(mm))

#### DO-214AC(SMA)

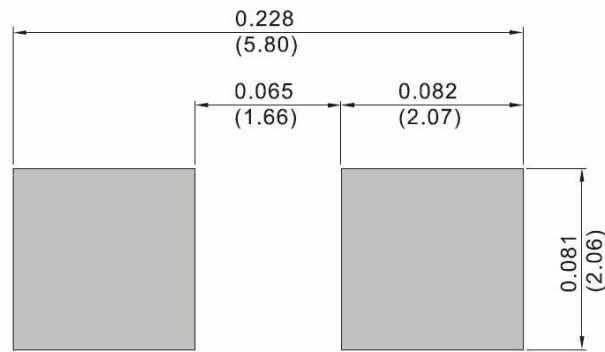


## Effective Super Fast Recovery Diodes

**ES2AA~ES2JA**
**2A**
**50 to 600V**
**DO-214AC(SMA)**

### Mounting Pad Layout (Unit: inch(mm))

#### DO-214AC(SMA)



### Packaging Information

Part Number	Component Package	Quantity
<b>ES2AA~ES2JA</b>	DO-214AC (SMA)	5000 PCS

### Warning



- ◆ SOCAY owns the rights to a number of patents, trademarks, copyrights, trade secrets, and other intellectual property.
- ◆ SOCAY reserves the right to make changes without further notice to any products herein.
- ◆ SOCAY makes no warranties, representations or warranties as to the fitness of its products for any particular purpose, and disclaims any liability.
- ◆ The parameters provided in the SOCAY datasheet specification may vary from application to application, and the actual performance may vary over time. All operating parameters must be verified by the customer's technical expert before application.
- ◆ Any and all responsibilities and liabilities are disclaimed if any item under this notice of warning is not complied with.