

# ES2A-A THRU ES2G-A

## SURFACE MOUNT FAST ULTRAFAST RECTIFIER

VOLTAGE: 50 TO 400V

CURRENT: 2.0A



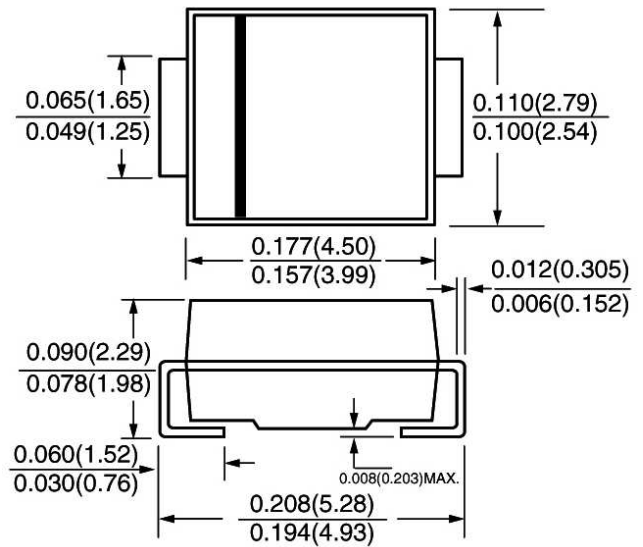
### FEATURE

Ideal for surface mount pick and place application  
 Low profile package  
 Built-in strain relief  
 High surge capability  
 High temperature soldering guaranteed  
 260°C/10sec/at terminals  
 Glass passivated chip  
 Ultrafast recovery time for high efficiency

### MECHANICAL DATA

Terminal: Solder plated, solderable per MIL-STD-750,  
 Method 2026  
 Case: JEDEC DO-214AC molded plastic body over  
 passivated chip  
 Polarity: color band denotes cathode

### SMA / DO-214AA



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

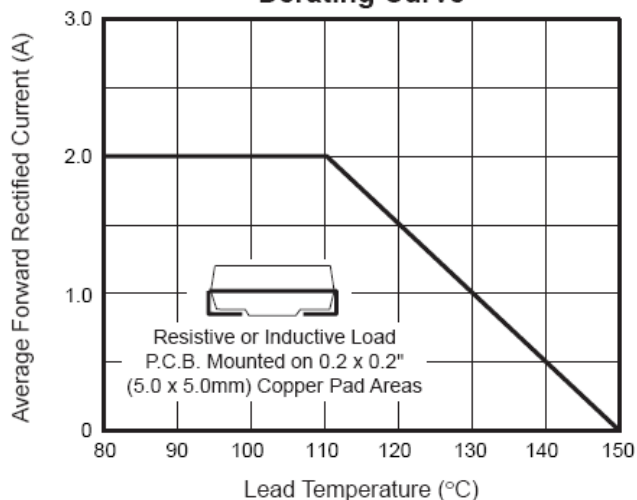
(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated,  
 for capacitive load, derate current by 20%)

	SYMBOL	ES2A-A	ES2B-A	ES2C-A	ES2D-A	ES2G-A	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	50	100	150	200	400	V
Maximum RMS Voltage	V <sub>rms</sub>	35	70	105	140	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	50	100	150	200	400	V
Maximum Average Forward Rectified at T <sub>L</sub> =100°C	I <sub>f(av)</sub>	2.0					A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	50.0					A
Maximum Instantaneous Forward Voltage at rated forward current	V <sub>f</sub>	0.92				1.25	V
Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	10.0 350.0					μA
Maximum Reverse Recovery Time (Note1)	T <sub>rr</sub>	15				25	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	18.0					pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub> R <sub>th(jl)</sub>	75.0 20.0					°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-55 to +150					°C

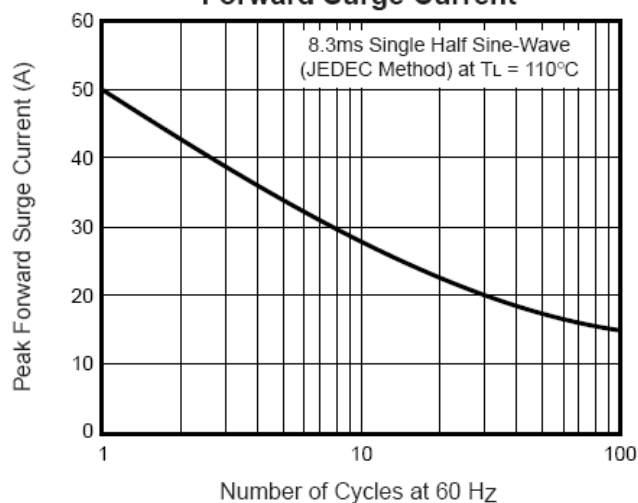
Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Units mounted on P.C.B. 5.0×5.0mm(0.013mm thick) land areas

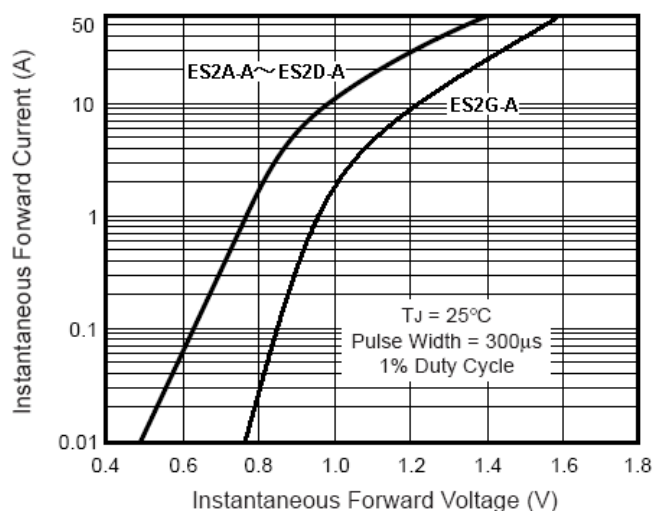
**Fig. 1 – Maximum Forward Current Derating Curve**



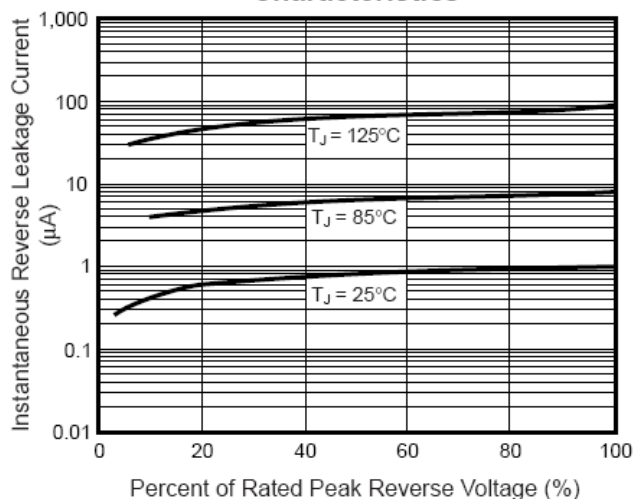
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Leakage Characteristics**



**Fig. 5 – Typical Junction Capacitance**

