

ES2A-A THRU ES2J-A

SURFACE MOUNT FAST ULTRAFAST RECTIFIER

VOLTAGE: 600V

CURRENT: 2.0A



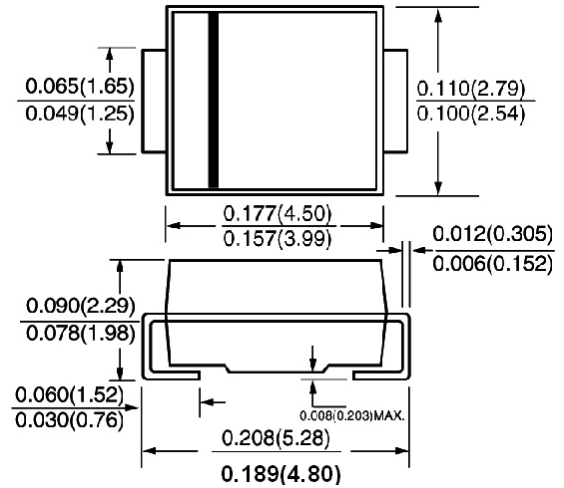
FEATURE

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-214AC



Dimensions in inches and (millimeters)

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	ES2J-A	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	150	200	400	600	V
Maximum RMS Voltage	V _{rms}	35	70	105	140	280	420	V
Maximum DC blocking Voltage	V _{dc}	50	100	150	200	400	600	V
Maximum Average Forward Rectified at T _L = 100°C	I _{f(av)}	2.0						A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	I _{fsm}	50.0						A
Maximum Instantaneous Forward Voltage at rated forward current 2.0A	V _f	0.92			1.25		1.7	V
Maximum DC Reverse Current at rated DC blocking voltage Ta = 25°C Ta = 125°C	I _r	2.0 50.0						µA
Maximum Reverse Recovery Time (Note 1)	T _{rr}	20				25	35	nS
Typical Junction Capacitance (Note 2)	C _j	18.0						pF
Typical Thermal Resistance (Note 3)	R _{th(jl)}	20.0						°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150						°C

Note:

- Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to terminal mounted on 5×5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES ES2A-A THRU ES2J-A

Fig. 1 – Maximum Forward Current Derating Curve

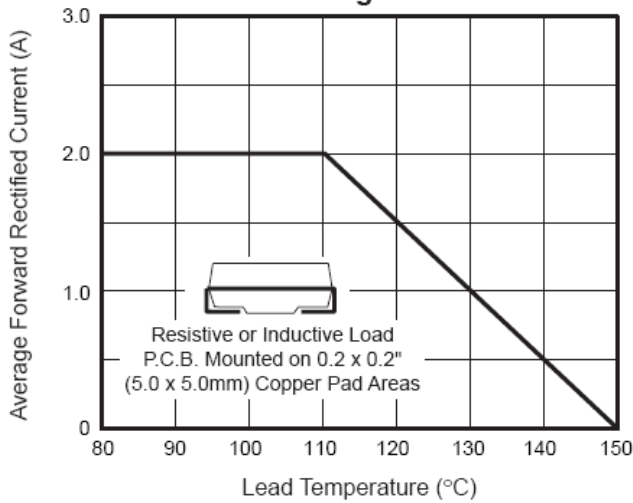


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

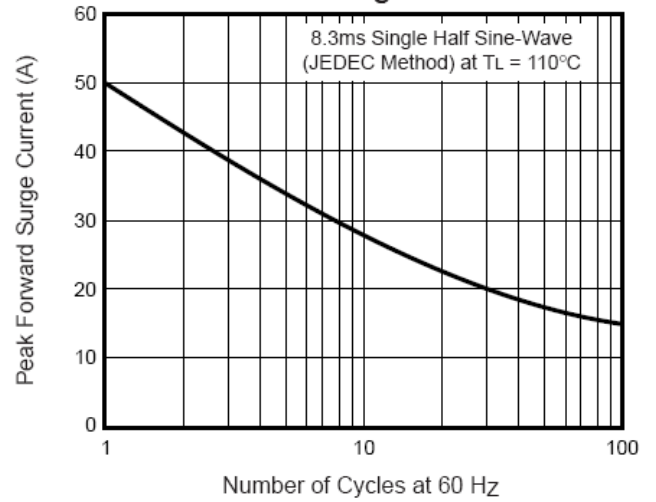


Fig. 3 – Typical Instantaneous Forward Characteristics

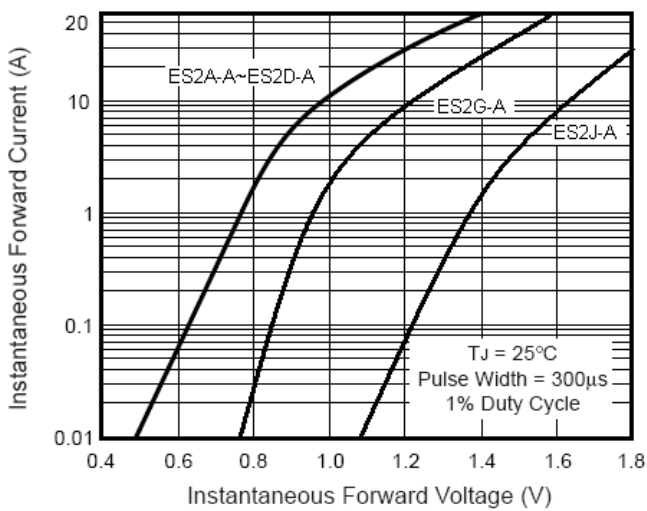


Fig.4- Typical Reverse Current

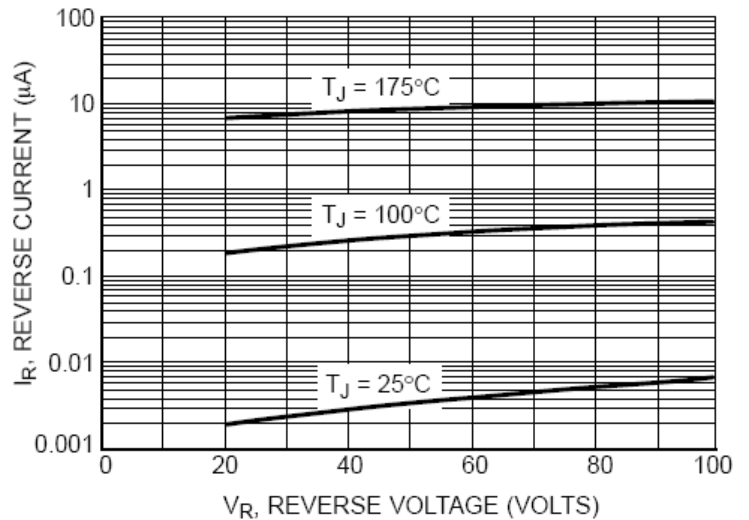


Fig. 5 – Typical Junction Capacitance

