

ES2JA-27C

SURFACE MOUNT FAST ULTRAFAST RECTIFIER

VOLTAGE: 600V

CURRENT: 2.0A



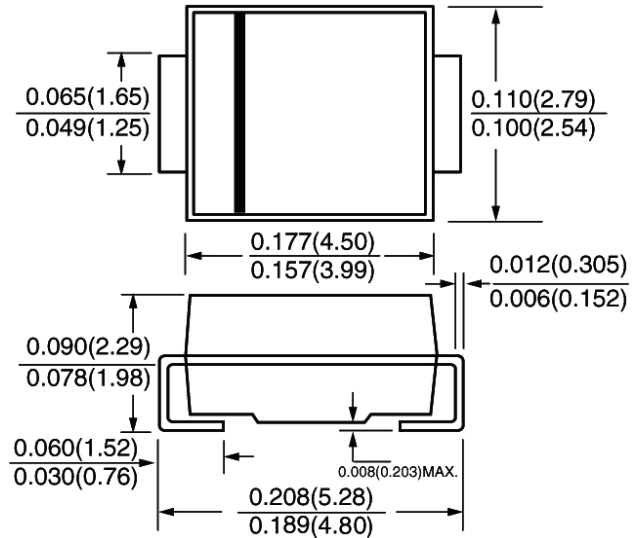
FEATURE

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 J-STD-002
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)

	SYMBOL	ES2JA-27C	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified	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	1.7	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	I _r	2.0 50.0	μA
Maximum Reverse Recovery Time (Note1)	T _{rr}	35	nS
Typical Junction Capacitance (Note 2)	C _j	16	pF
Typical Thermal Resistance (Note 3)	R _{th(jl)}	23	°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150	°C

Note:

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

Fig. 1 – Maximum Forward Current Derating Curve

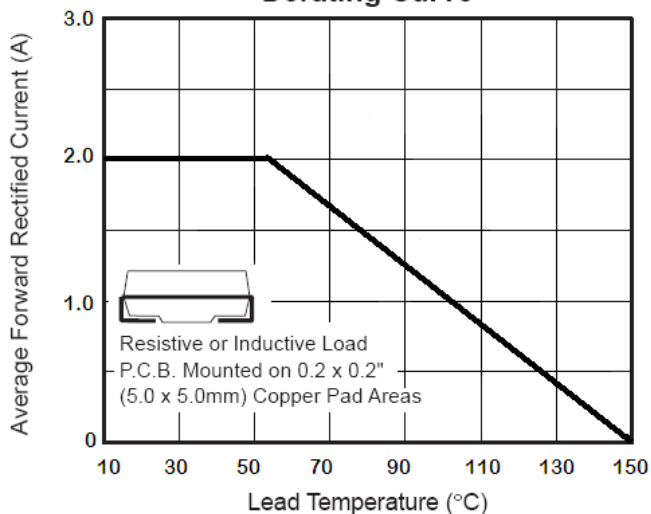


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

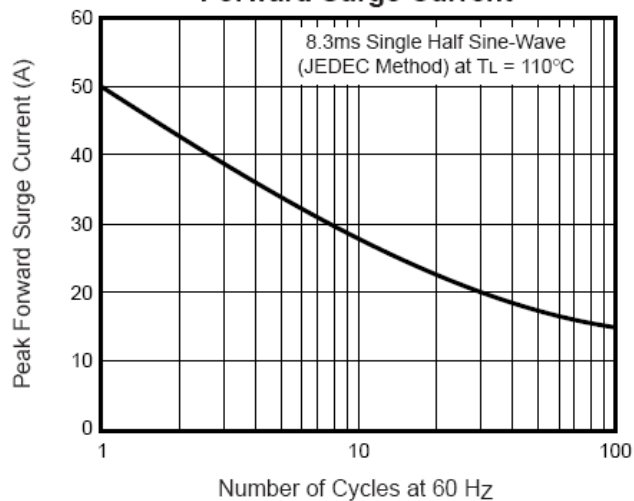


Fig. 3 – Typical Instantaneous Forward Characteristics

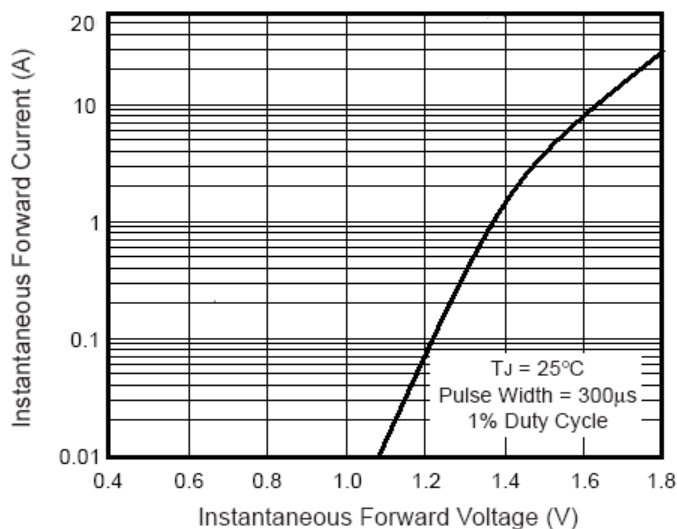


Fig.4- Typical Reverse Current

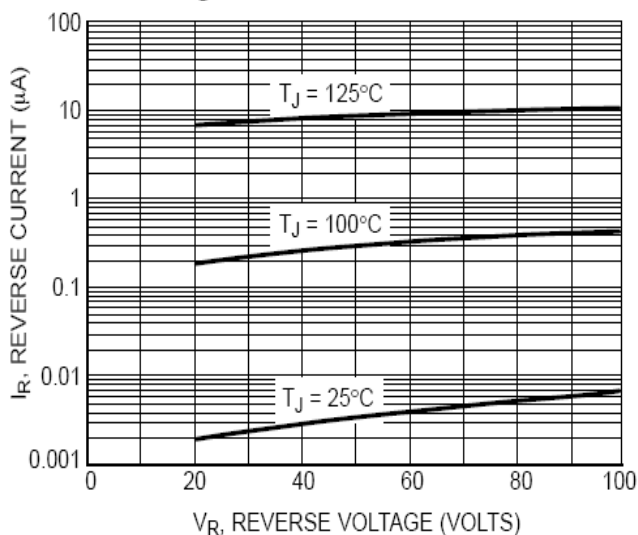


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

