

## Surface Mount Schottky Barrier Rectifiers

Reverse Voltage - 20 to 100Volts  
Forward Current - 1.0 Amperes

### Features

- Low power loss, high efficiency
- For surface mounted applications
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

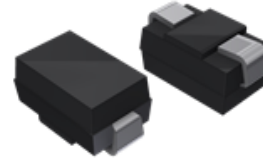
### Mechanical Data

- Case: JEDEC A-SMA molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

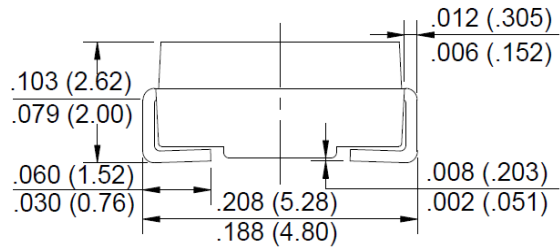
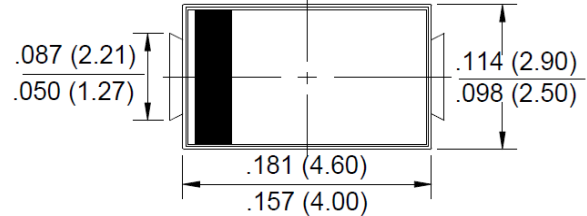
### Applications

- For use in low voltage, high frequency inverters, polarity protection applications

### A-SMA



RoHS  
COMPLIANT



Package Outline Dimensions in Inches (Millimeters)

## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	SS12A	SS13A	SS14A	SS15A	SS16A	SS18A	SS110A	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current @T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Peak Forward Voltage at 1.0A DC (Note1)	V <sub>F</sub>	0.55			0.70		0.85		V
Maximum DC Reverse Current @T <sub>J</sub> =25°C	I <sub>R</sub>	1.0							mA
at Rated DC Blocking Voltage @T <sub>J</sub> =100°C		10							
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	110							pF
Typical Thermal Resistance Junction to Lead	R <sub>θJL</sub>	20							°C/W
Junction Temperature Range	T <sub>J</sub>	-55 to+150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+150							°C

Notes: 1. 300uS pulse width, 2%duty cycle.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3. The typical data above is for reference only .

# Rating and Characteristic Curves

## SS12A THRU SS110A



Fig. 1 - Forward Current Derating Curve

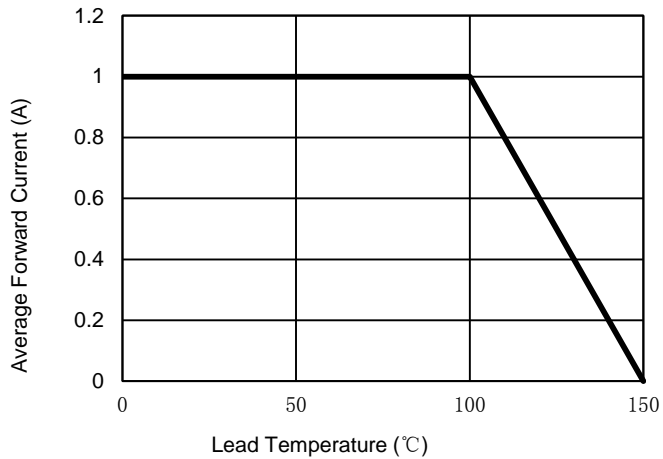


Fig. 2 - Maximum Non-Repetitive Surge Current

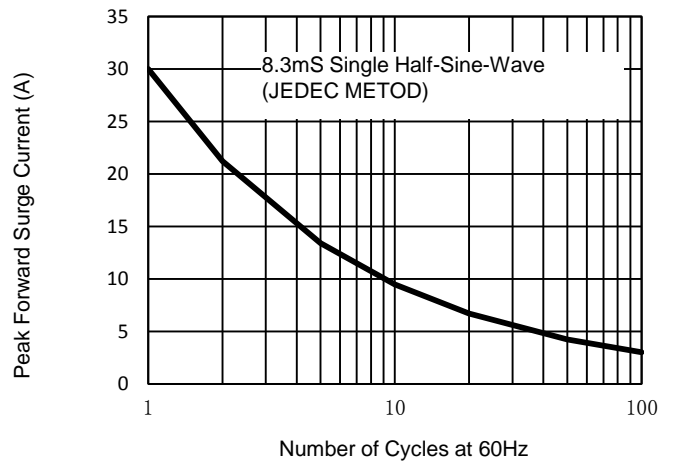


Fig. 3 - Typical Reverse Characteristics

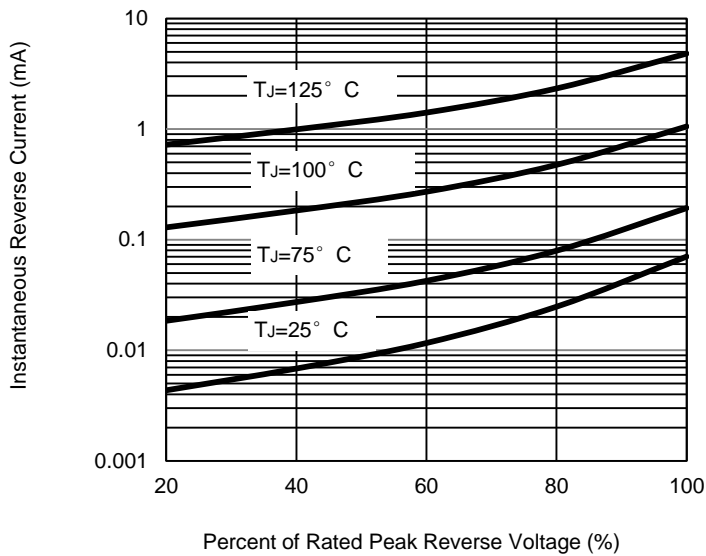


Fig. 4 - Typical Forward Characteristics

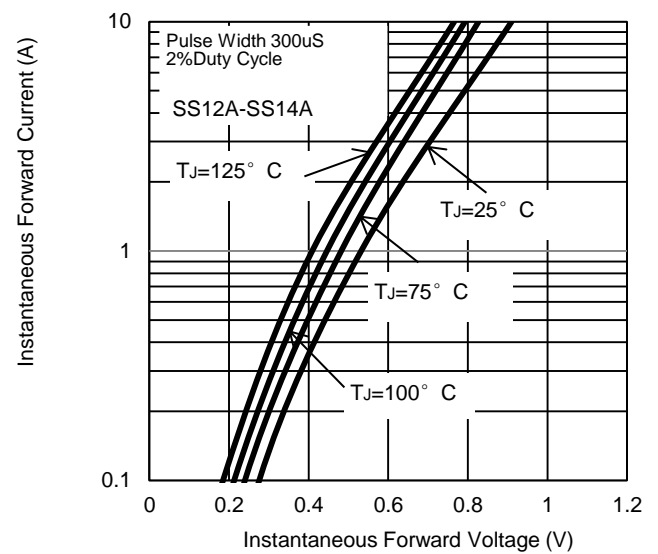


Fig. 5 - Typical Forward Characteristics

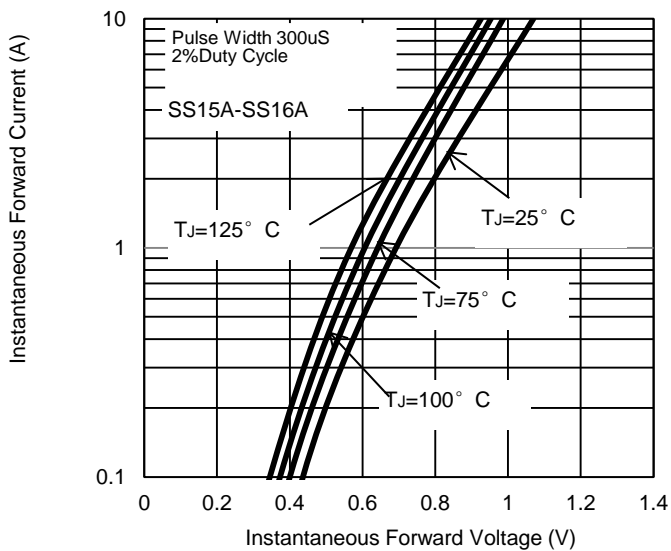
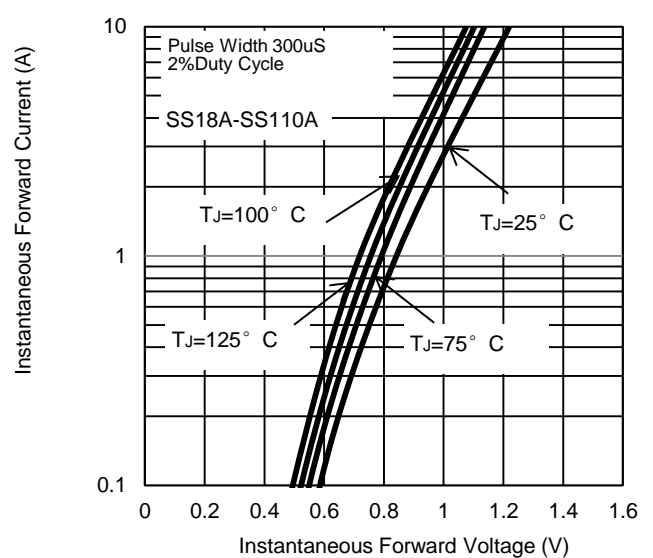


Fig. 6 - Typical Forward Characteristics



The curve above is for reference only.



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