

<p><b>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</b></p> <p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>● For surface mounted applications</li> <li>● Metal-Semiconductor junction with guarding</li> <li>● Epitaxial construction</li> <li>● Very low forward voltage drop</li> <li>● High current capability</li> <li>● Plastic material has UL flammability classification 94V-0</li> <li>● For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>● Case: Molded Plastic</li> <li>● Polarity: Indicated by cathode band</li> <li>● Weight: 0.002 ounces, 0.064 grams</li> </ul>	<p>REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 3.0 Amperes</p> <p style="text-align: center;"><b>SMA</b></p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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**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	SS32A	SS33A	SS34A	SS35A	SS36A	SS38A	SS310A	UNIT	
Maximum Recurrent 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(AV)	3.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	80							A	
Maximum Forward Voltage at 3.0A DC	V <sub>F</sub>	0.45	0.55	0.6	0.7		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	I <sub>R</sub>	1.0							20	mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	250							pF	
Typical Thermal Resistance (Note2)	R <sub>θJL</sub>	10							°C/W	
Typical Thermal Resistance (Note3)	R <sub>θJA</sub>	50							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to + 175							°C	

NOTES:1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance junction to lead.  
3. Thermal resistance junction to ambient.

**RATING AND CHARACTERISTIC CURVES**  
**SS32A thru SS310A**



FIG. 1 - FORWARD CURRENT DERATING CURVE

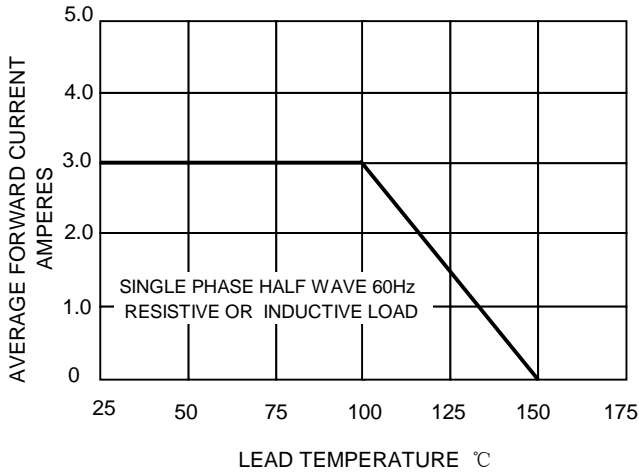


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

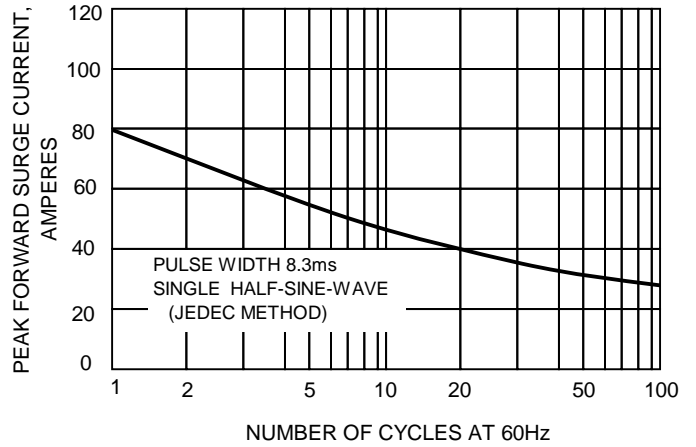


FIG.3-TYPICAL FORWARD CHARACTERISTICS

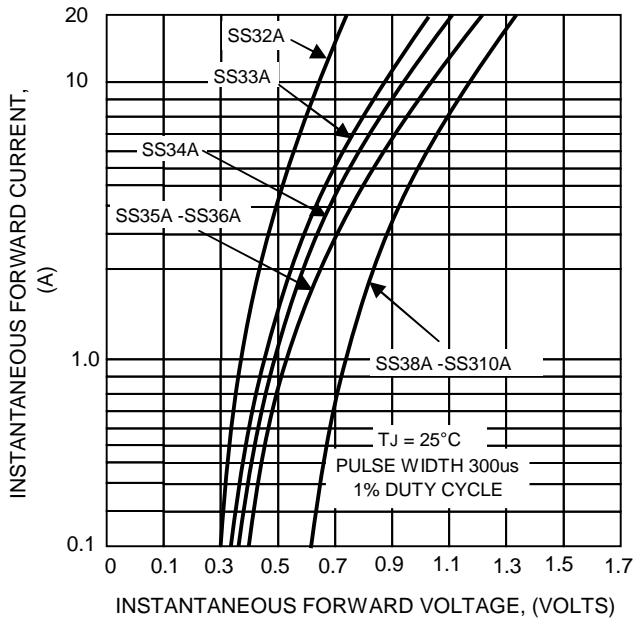


FIG.4-TYPICAL JUNCTION CAPACITANCE

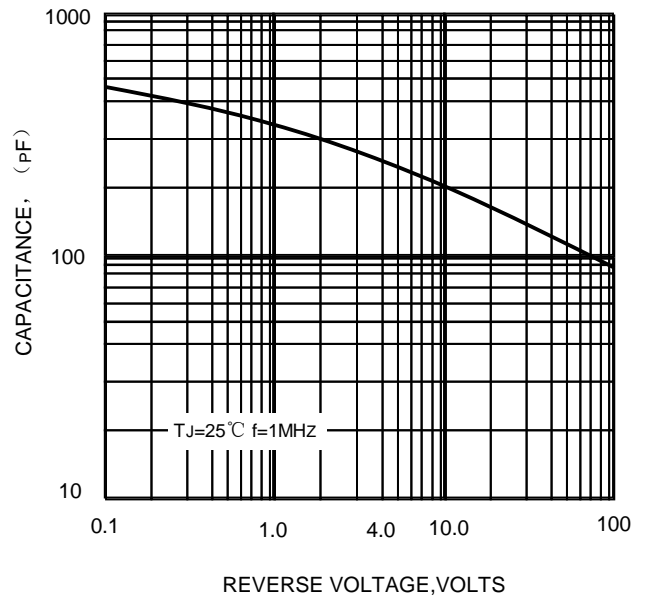


FIG.5-TYPICAL REVERSE CHARACTERISTICS

