

<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: Color band denotes cathode</li> <li>● Weight: 0.003 ounces, 0.093 grams</li> <li>● Mounting position: Any</li> </ul>	<p style="text-align: center;">REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 1.0 Amperes</p> <div style="text-align: center;"> <p><b>SMB</b></p> </div> <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	SS12B	SS13B	SS14B	SS15B	SS16B	SS18B	SS110B	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 <sub>(AV)</sub>	1.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	40							A	
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	0.45	0.55	0.6	0.70		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							10	mA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	110							pF	
Typical Thermal Resistance (Note2)	R <sub>θJL</sub>	20							°C/W	
Operating Temperature Range	T <sub>J</sub>	-55 to + 150							°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150							°C	

NOTES: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance junction to lead.



FIG. 1 - FORWARD CURRENT DERATING CURVE

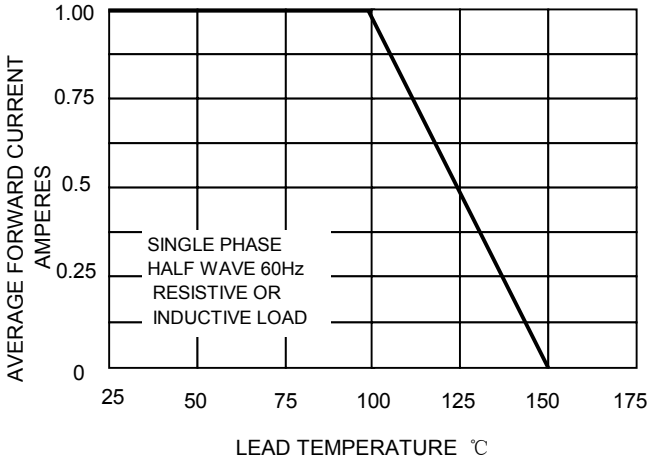


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

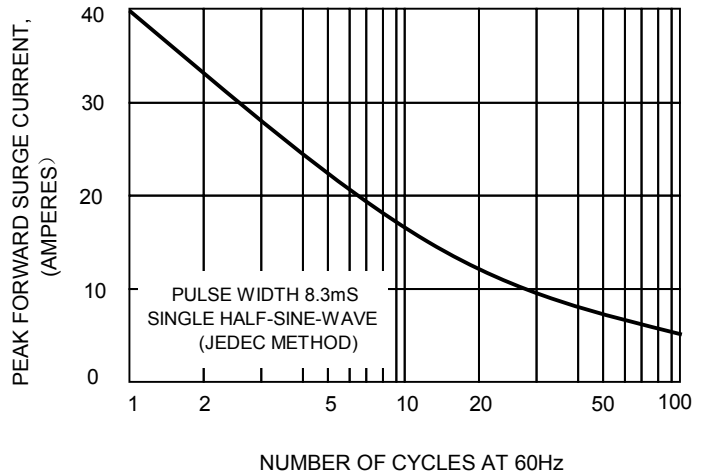


FIG.3-TYPICAL FORWARD CHARACTERISTICS

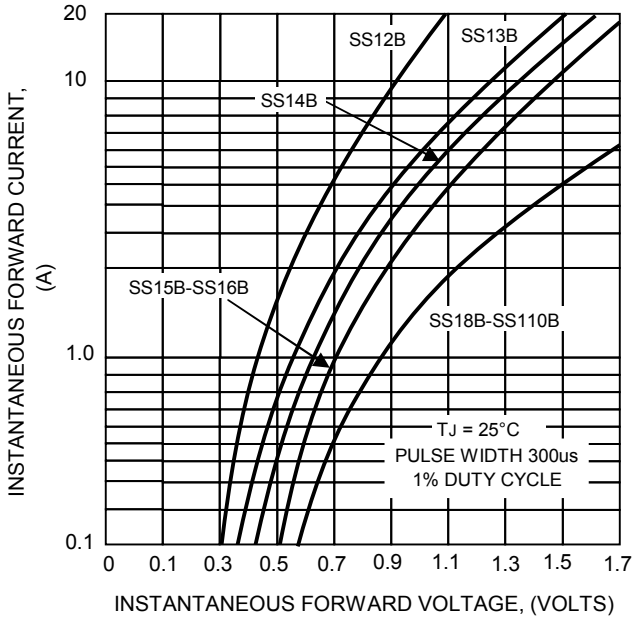


FIG.4-TYPICAL JUNCTION CAPACITANCE

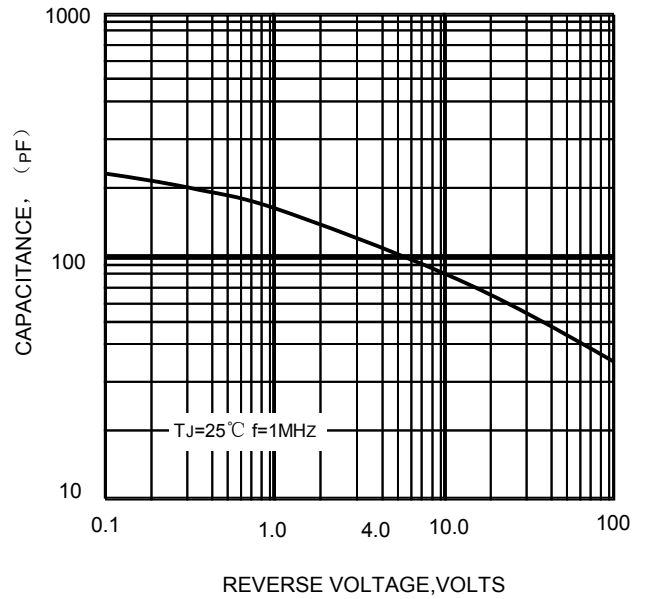


FIG.5-TYPICAL REVERSE CHARACTERISTICS

