

<p>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</p> <p>FEATURES</p> <ul style="list-style-type: none"> ● For surface mounted applications ● Metal-Semiconductor junction with guarding ● Epitaxial construction ● Very low forward voltage drop ● High current capability ● Plastic material has UL flammability classification 94V-0 ● For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications. <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: Molded Plastic ● Polarity: Color band denotes cathode ● Weight: 0.003 ounces, 0.093 grams ● Mounting position: Any 	<p style="text-align: center;">REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 1.0 Amperes</p> <div style="text-align: center;"> <p>SMB</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 _{RRM}	20	30	40	50	60	80	100	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	V	
Maximum Average Forward Rectified Current @T _L =100 °C	I _(AV)	1.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I _{FSM}	40							A	
Maximum Forward Voltage at 1.0A DC	V _F	0.45	0.55	0.6	0.70		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	1.0							10	mA
Typical Junction Capacitance (Note1)	C _J	110							pF	
Typical Thermal Resistance (Note2)	R _{θJL}	20							°C/W	
Operating Temperature Range	T _J	-55 to + 150							°C	
Storage Temperature Range	T _{STG}	-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

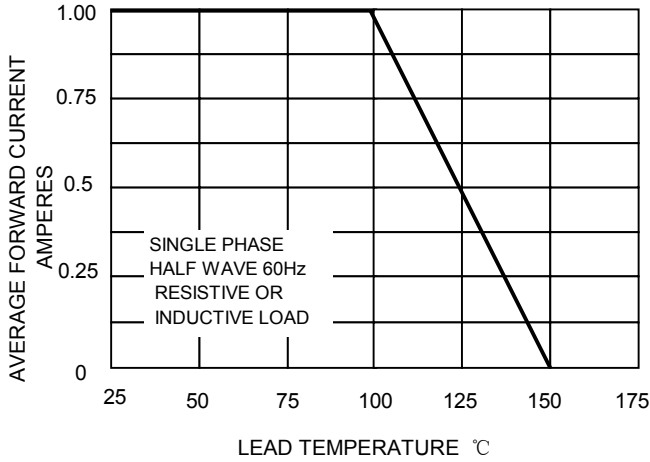


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

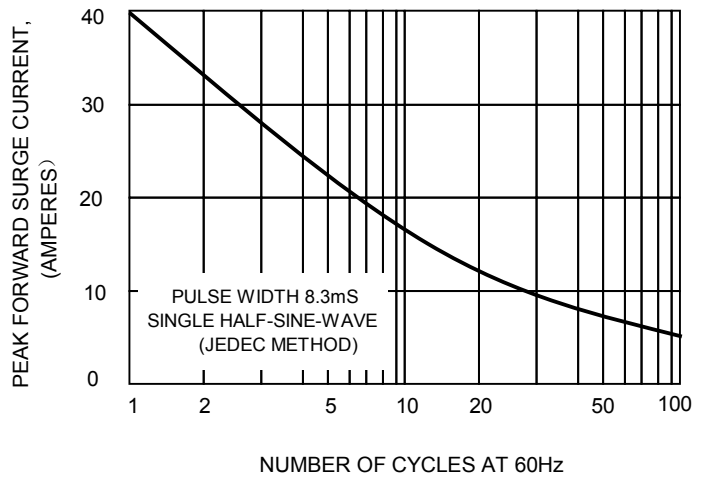


FIG.3-TYPICAL FORWARD CHARACTERISTICS

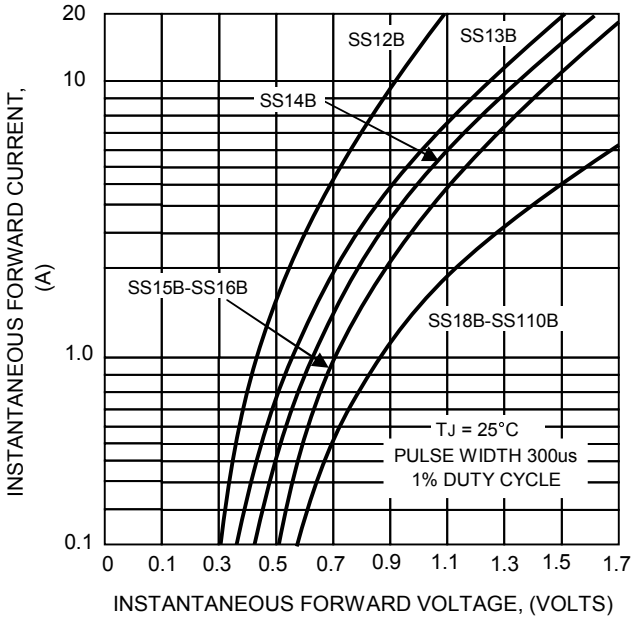


FIG.4-TYPICAL JUNCTION CAPACITANCE

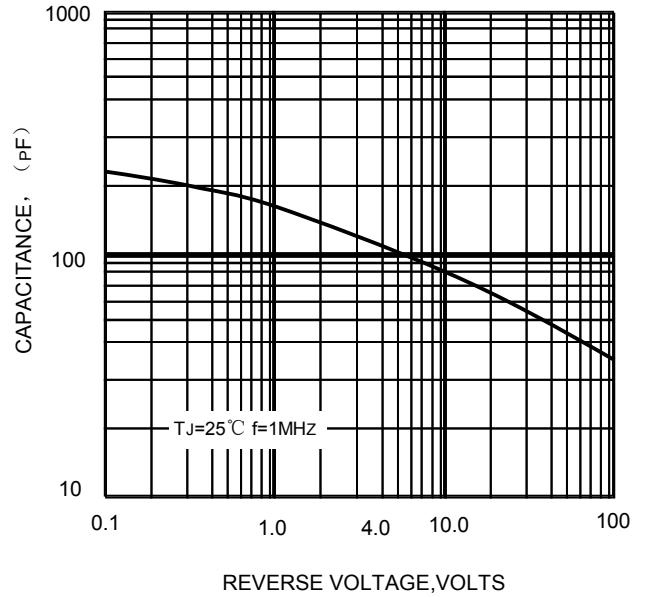


FIG.5-TYPICAL REVERSE CHARACTERISTICS

