

<p>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</p>	<p>REVERSE VOLTAGE - 20 to 100 Volts FORWARD CURRENT - 5.0 Amperes</p>
<p>FEATURES</p> <ul style="list-style-type: none"> ● Metal-Semiconductor junction with guard ring ● Epitaxial construction ● Low forward voltage drop ● High current capability ● The plastic material carries UL recognition 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 	<p>SMB</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

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	SS52B	SS53B	SS54B	SS55B	SS56B	SS58B	SS510B	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 0.375" (9.5mm) Lead Lengths @T _L =95 °C	I _(AV)	5.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	150							A	
Maximum Forward Voltage at 5.0A DC	V _F	0.45	0.55	0.6	0.7		0.85		V	
Maximum DC Reverse Current @T _J =25°C at Rated DC Blocking Voltage @T _J =100°C	I _R	1.0				50				mA
Typical Junction Capacitance (Note1)	C _J	500			350				pF	
Typical Thermal Resistance (Note2)	R _{θJA}	15			10				°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 ambient,

FIG. 1 – FORWARD CURRENT DERATING CURVE

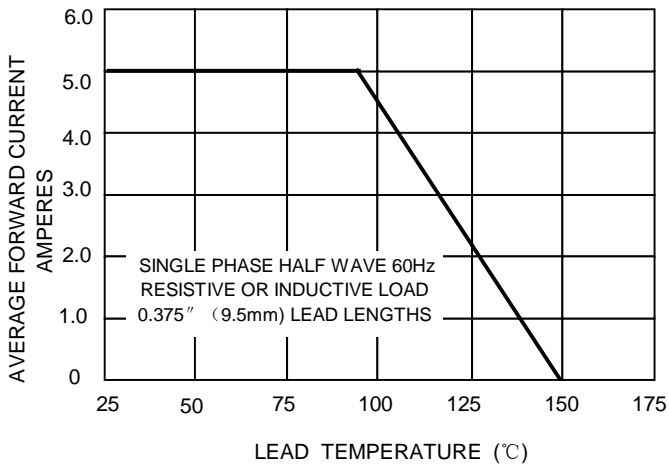


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

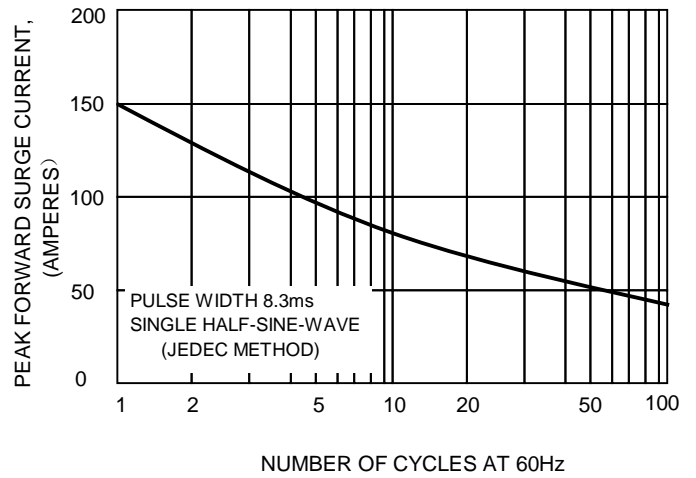


FIG.3 – TYPICAL JUNCTION CAPACITANCE

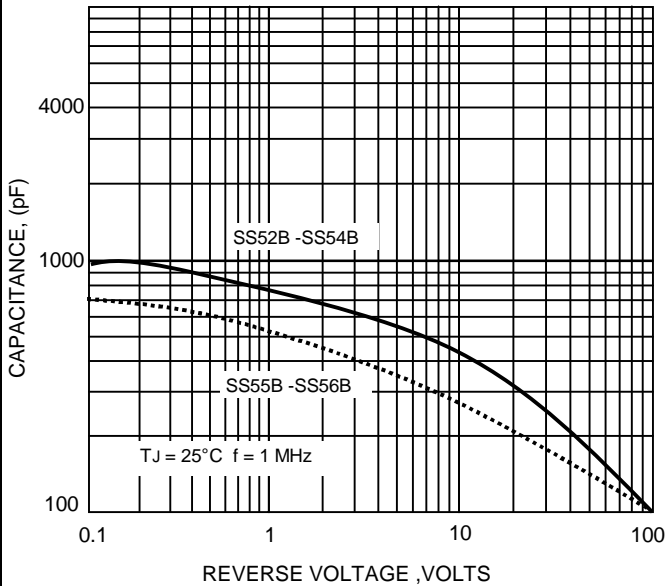


FIG.4-TYPICAL FORWARD CHARACTERISTICS

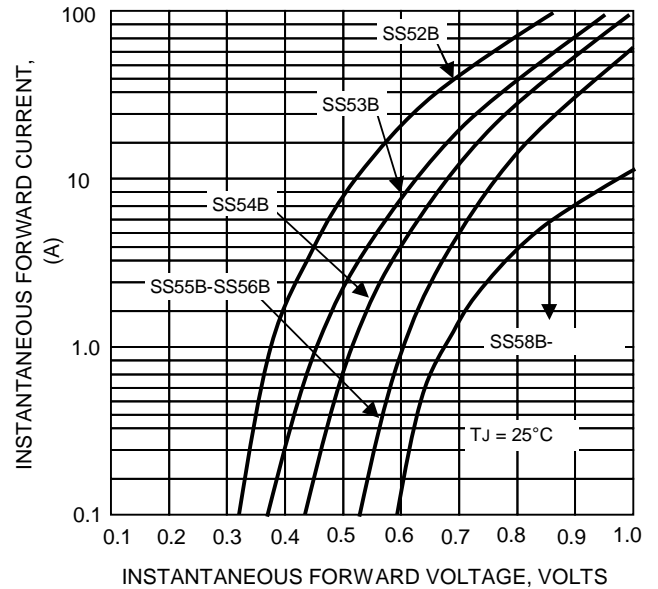


FIG.5-TYPICAL REVER CHARACTERISTICS

