

## SS52B THRU SS510B

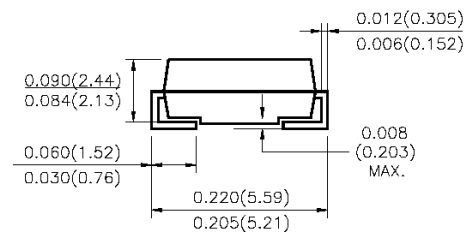
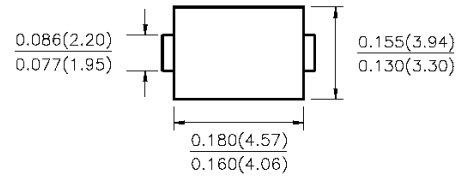
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER  
VOLTAGE RANGE 20 to 100 Volts    CURRENT 5.0 Ampere

**FEATURES**

- ◆ Low profile surface mount package
- ◆ Built-in strain relief
- ◆ High switching speed
- ◆ Low voltage drop, high efficiency
- ◆ For use in low voltage high frequency inverters
- ◆ Free willing, and polarity protection applications
- ◆ Guarding for over voltage protection

**Mechanical Data**

- ◆ Case: Transfer molded plastic
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ Lead: Solder plated, solderable per MIL-STD-750 method 2026
- ◆ Polarity: Color band denotes cathode end

**DO-214AA (SMB)**

**Dimensions in inches and (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%**

PARAMETER	SYMBOL	SS 52B	SS 53B	SS 54B	SS 55B	SS 56B	SS 58B	SS 59B	SS 510B	UNIT	
Maximum Repetitive Peak Reverse Voltage	VRRM	20	30	40	50	60	80	90	100	Volts	
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	63	70	Volts	
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	90	100	Volts	
Maximum Average Forward Rectified Current	I(AV)	5.0								Amps	
Peak Forward Surge Current 8.3mS single half sine-wave superimposed on rated load (JEDEC method)	IFSM	120								Amps	
Maximum Instantaneous Forward Voltage @ 5.0A(Note 1)	V <sub>F</sub>	0.55			0.75		0.85			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage	I <sub>R</sub>	TA = 25°C	0.5								uA
		TA = 100°C	20.0			10.0					
Typical Thermal Resistance (Note 2)	RθJA	55								pF	
	RθJL	12									
Operating Junction Temperature	T <sub>J</sub>	-55 to +125								°C/W	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150								°C	

Note: 1. Pulse test: 300µs pulse width, 1% duty cycle

2. PCB mounted with 0.55"×0.55" (14mm×14mm) copper pads

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## RATING AND CHARACTERISTIC CURVES SS52B THRU SS510B

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

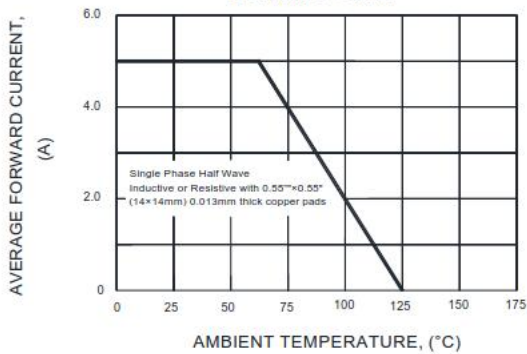


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

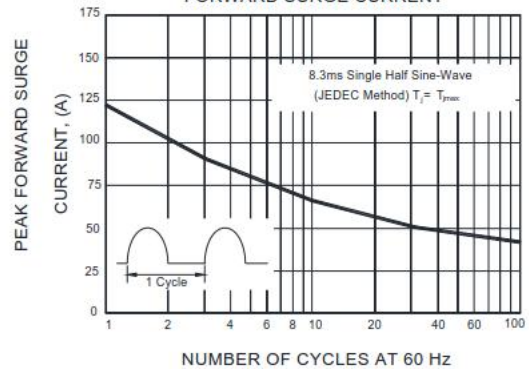


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

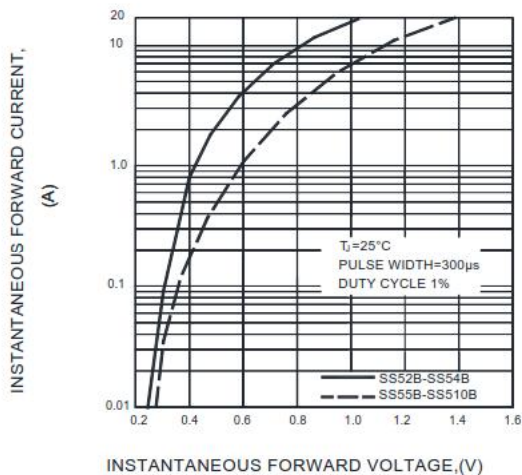


FIG.4-TYPICAL REVERSE CHARACTERISTICS

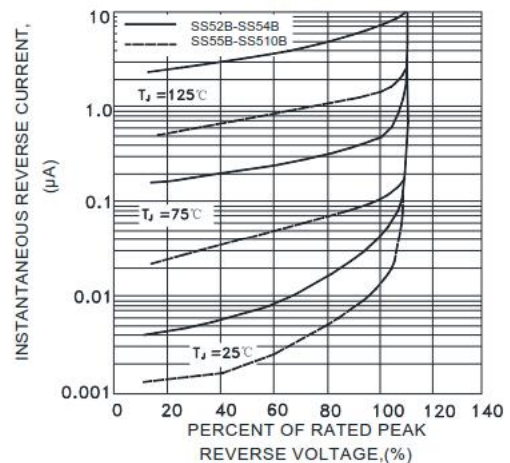
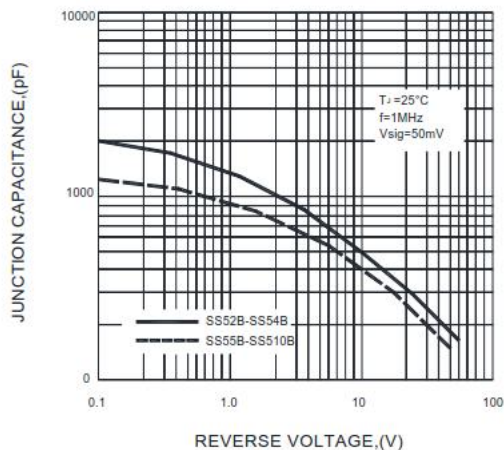


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.