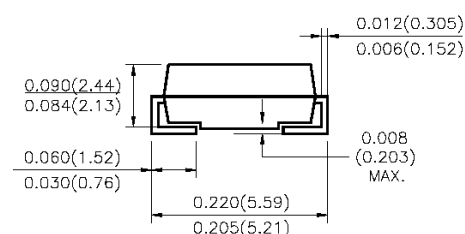
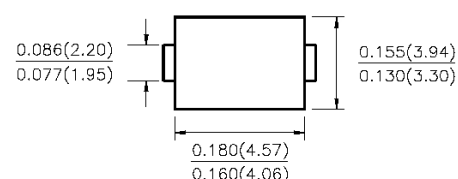


Kingtronics®**SS52B THRU SS510B****SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER****VOLTAGE RANGE** 20 to 100 Volts**CURRENT** 5.0 Ampere**FEATURES**

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)**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified ,
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load derate current by 20%

Dimensions in inches and (millimeters)

PARAMETER	SYMBOL	SS 52B	SS 53B	SS 54B	SS 55B	SS 56B	SS 58B	SS 59B	SS 510B	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	Volts
Maximum DC Blocking Voltage	V _{DC}	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)	I _{FSM}	120								Amps
Maximum Instantaneous Forward Voltage @ 5.0A(Note1)	V _F	0.55			0.75		0.85			Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	T _A = 25°C	0.5								uA
	T _A = 100°C	20.0			10.0					
Typical Thermal Resistance (Note 2)	R _{θJA}	55								pF
	R _{θJL}	12								
Operating Junction Temperature	T _J	-55 to +125								°C/W
Storage Temperature Range	T _{STG}	-55 to +150								°C

1. Pulse test: 300 μs pulse width, 1% duty cycle
2. PCB mounted with 0.55"×0.55" (14mm×14mm) copper pads

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SS52B THRU SS510B

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

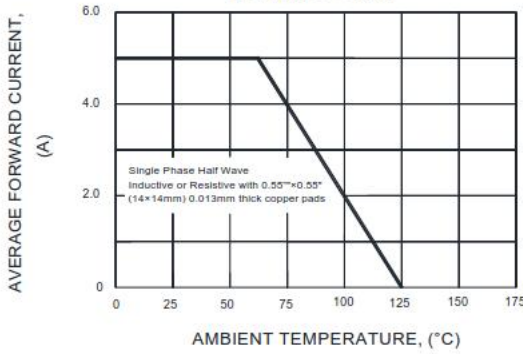


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

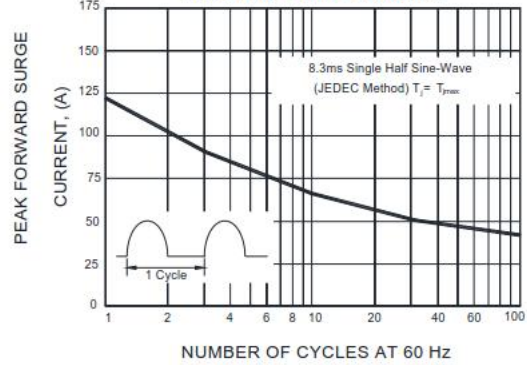


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

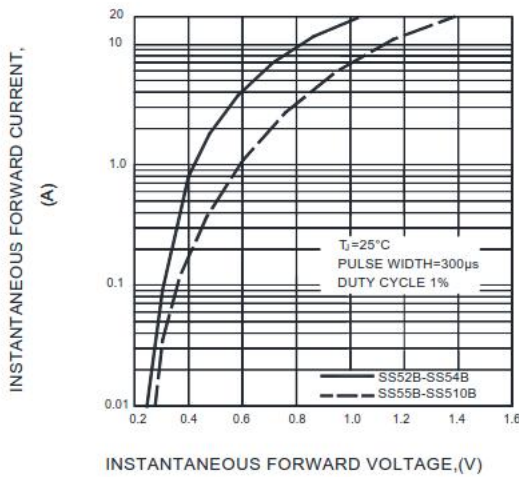


FIG.4-TYPICAL REVERSE CHARACTERISTICS

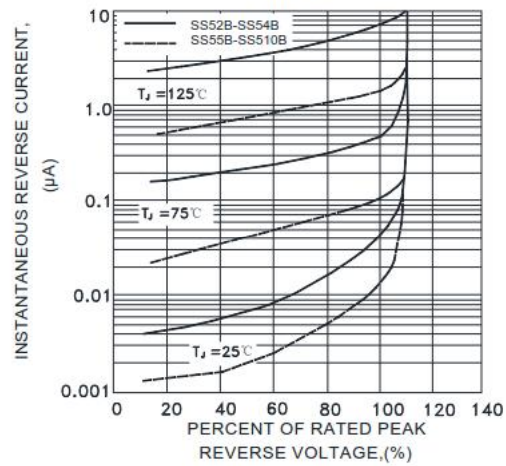
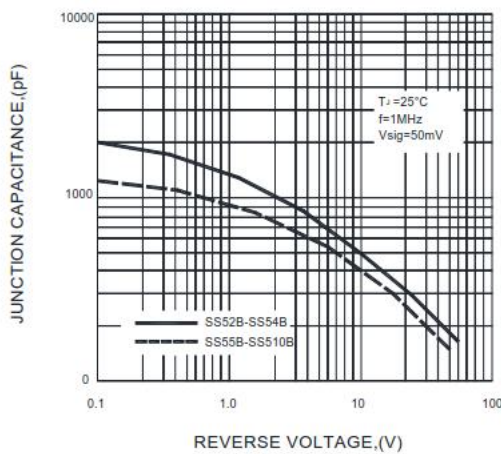


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.

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