

Kingtronics®**SS52A THRU
SS510A****SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**
REVERSE VOLTAGE 20 to 100 Volts FORWARD 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

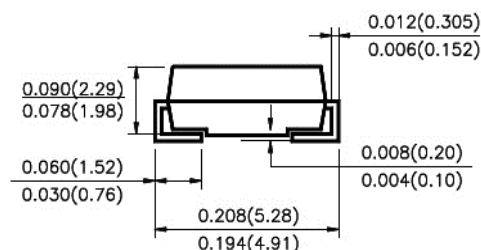
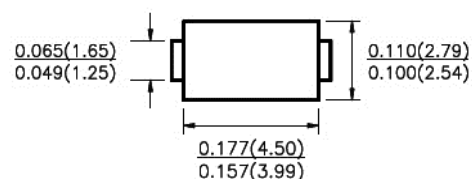
MECHANICAL DATA

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

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%

DO-214AC (SMA)

Dimensions in inches and (millimeters)

PARAMETER	SYMBOL	SS 52A	SS 53A	SS 54A	SS 55A	SS 56A	SS 58A	SS 59A	SS 510A	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 at 5.0A(NOTE 1)	V_F	0.55		0.70		0.85			VOLTS	
Maximum DC Reverse Current at Rated DC blocking voltage	I_R	0.5								mA
		$T_A=25^\circ\text{C}$		20.0		10.0				
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	55								$^\circ\text{C/W}$
	$R_{\theta JL}$	12								
Operating Junction Temperature	T_J	-55 to +125								$^\circ\text{C}$
Storage Temperature Rang	T_{STG}	-55 to +150								$^\circ\text{C}$

1- Pulse test: 300 μ s pulse width, 1% duty cycle

2- PCB mounted with 0.55" \times 0.55" (14mm \times 14mm) copper pads

Kingtronics® International Company

Website: www.kingtronics.com

Email: info@kingtronics.com

Tel: (852) 8106 7033

Fax: (852) 8106 7099

Kingtronics®

SS52A THRU SS510A

RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

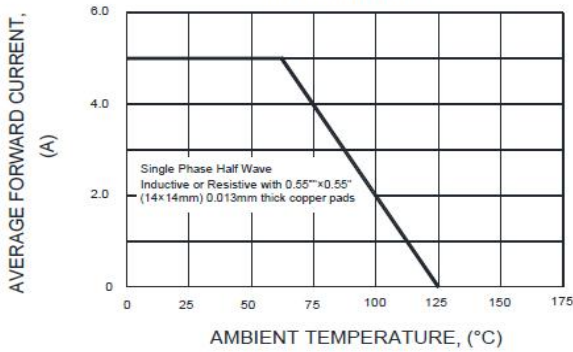


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

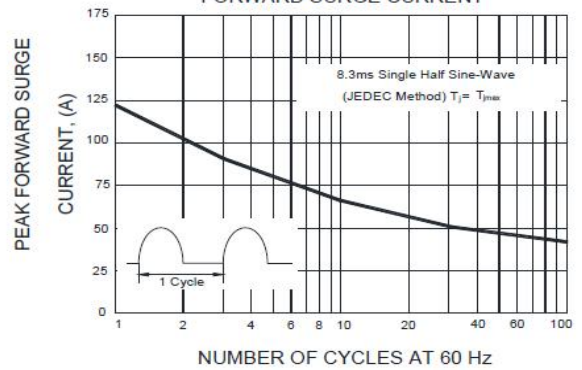


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

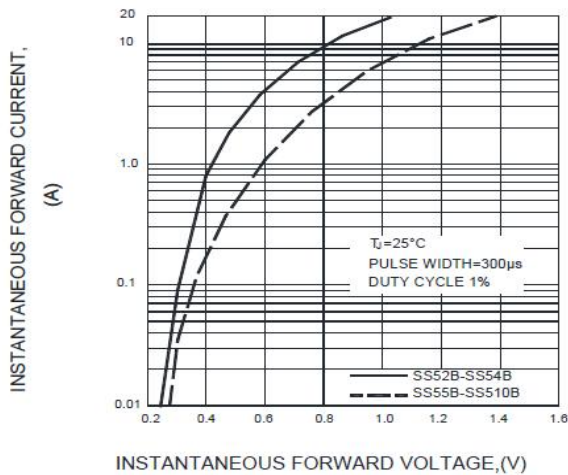


FIG.4-TYPICAL REVERSE CHARACTERISTICS

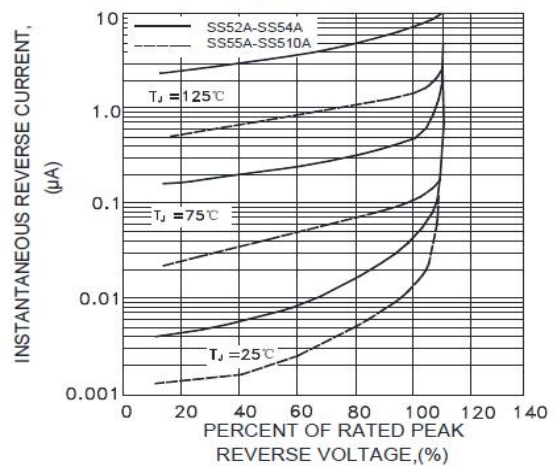
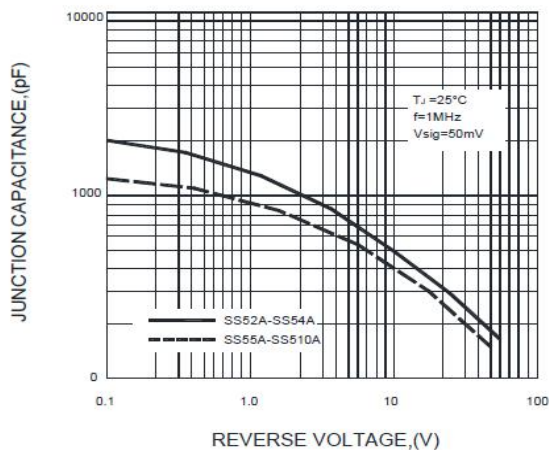


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.

Kingtronics® International Company