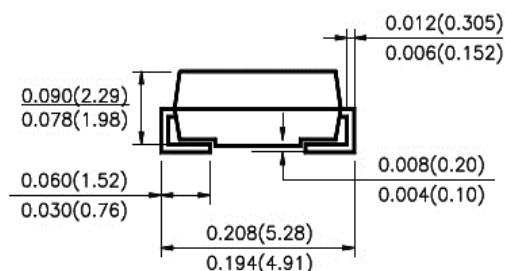
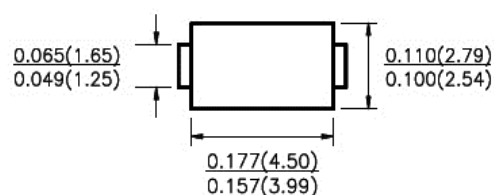


**Kingtronics**®**SS12 THRU SS110****SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER****REVERSE VOLTAGE 20 to 100 Volts FORWARD CURRENT 1.0 Ampere****FEATURES**

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  
 Weight: 0.002 ounce, 0.064 gram

**DO-214AC (SMA)****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified ,  
 Single phase, half wave, 60Hz, resistive or inductive load.

Dimensions in inches and (millimeters)

For capacitive load derate current by 20%

PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	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 at $T_L$ see figure 1 $T_L = 105^\circ\text{C}$	$I_{(AV)}$	1.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	30								Amps
Maximum instantaneous forward voltage at 1.0A(NOTE 1)	$V_F$	0.55			0.70		0.85			VOLTS
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$I_R$	$T_A = 25^\circ\text{C}$								mA
		20.0				10.0				
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	50								$^\circ\text{C/W}$
	$R_{\theta JL}$	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  $\mu\text{s}$  pulse width, 1% duty cycle

2-PCB mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pads

**Kingtronics**® International Company

## RATINGS AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

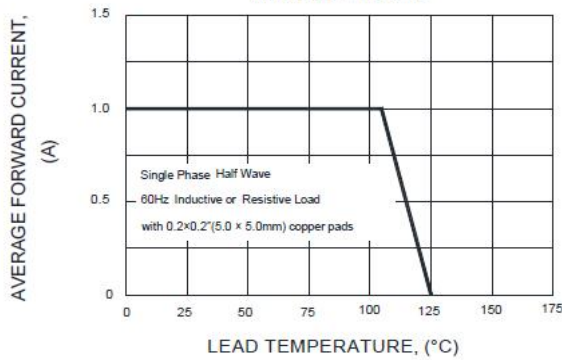


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

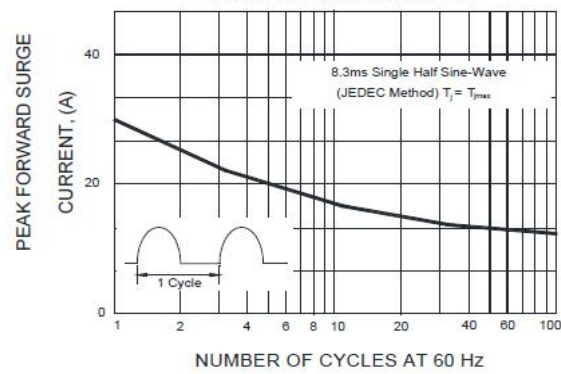


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

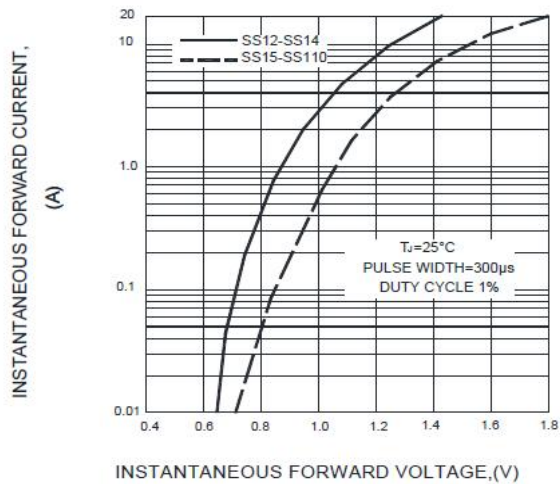


FIG.4-TYPICAL REVERSE CHARACTERISTICS

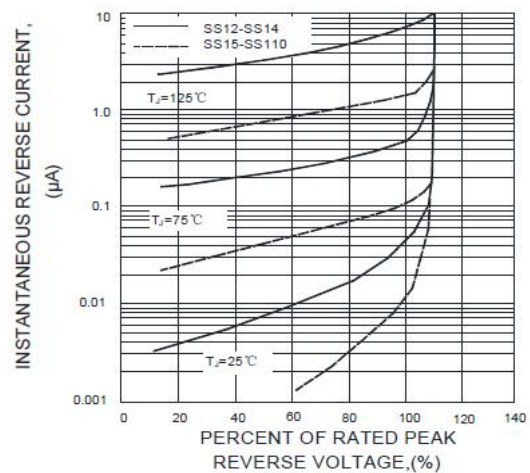
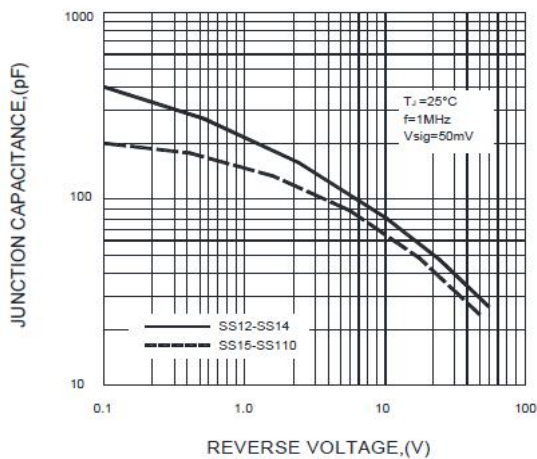


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice.