

### SS12 THRU SS120

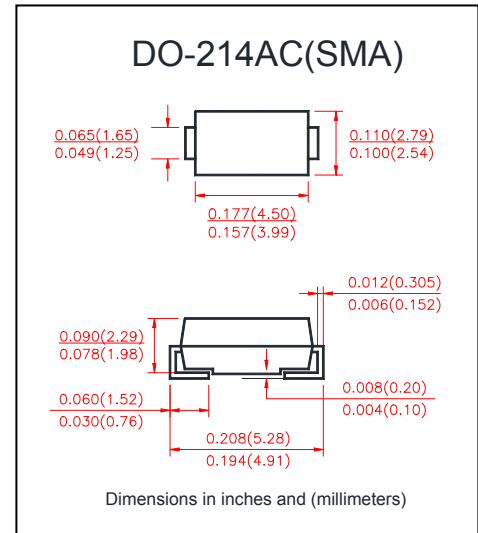
**VOLTAGE RANGE**      **20 to 200 Volts**  
**CURRENT**              **1.0 Ampere**

#### 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



#### 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%.

	SYMBOLS	SS12	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	40	50	60	80	100	150	200	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 @ 1.0A(Note1)	$V_F$	0.55		0.7		0.85		0.90	0.95	Volts
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ\text{C}$	0.5								mA
	$T_A = 100^\circ\text{C}$	20.0	10.0							
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55								$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	12								
Operating Junction Temperature	$T_J$	(-55 to +125)								$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)								$^\circ\text{C}$

#### Notes:

1. Pulse test: 300  $\mu\text{s}$  pulse width, 1% duty cycle
2. PCB mounted with 0.2×0.2" (5.0 × 5.0mm) copper pads



# WEE Technology Company Limited

## Schottky Barrier Rectifiers

SS12 THRU SS120

VOLTAGE RANGE      20 to 200 Volts  
 CURRENT              1.0 Ampere

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

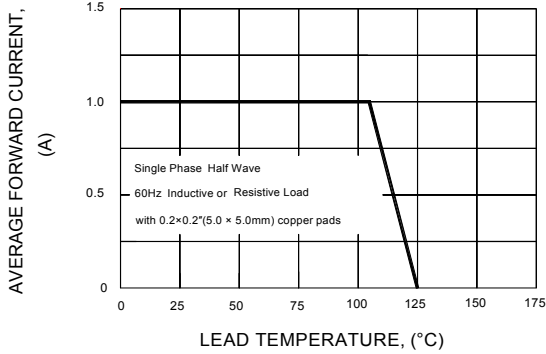


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

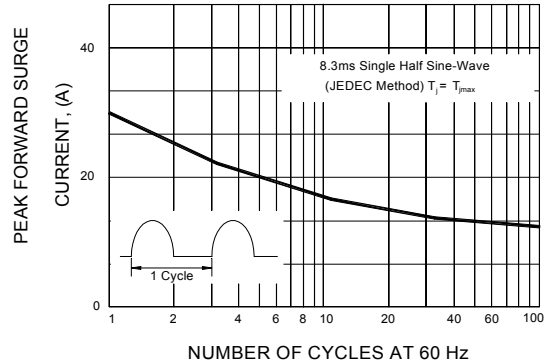


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

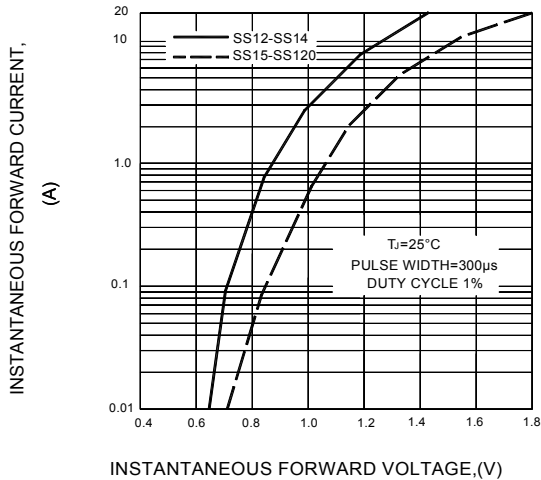


FIG.4-TYPICAL REVERSE CHARACTERISTICS

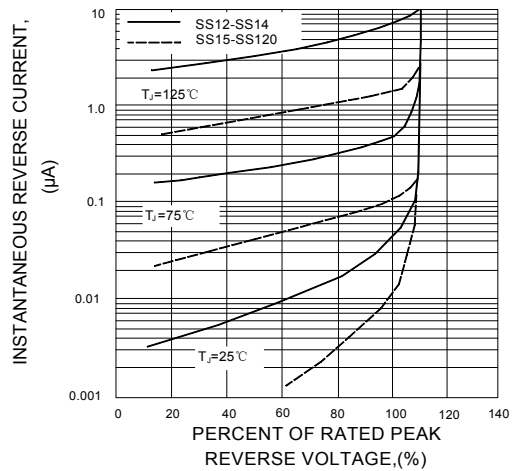
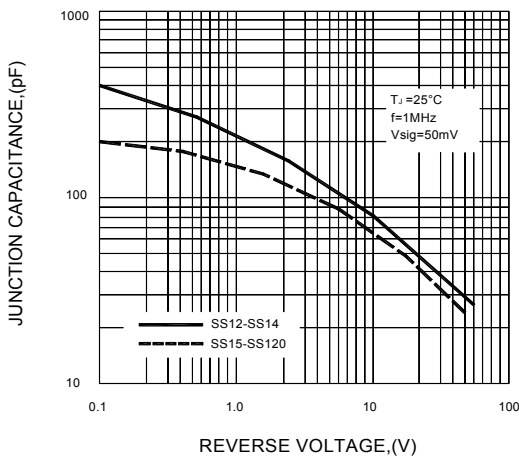


FIG.5-TYPICAL JUNCTION CAPACITANCE



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