

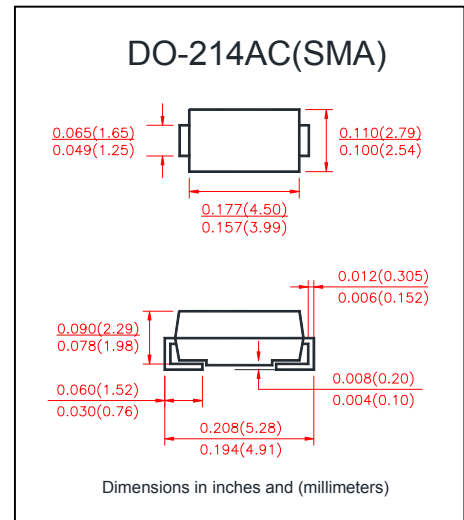
**VOLTAGE RANGE**      20 to 200 Volts  
**CURRENT**              5.0 Ampere

### 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
- Guardring 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

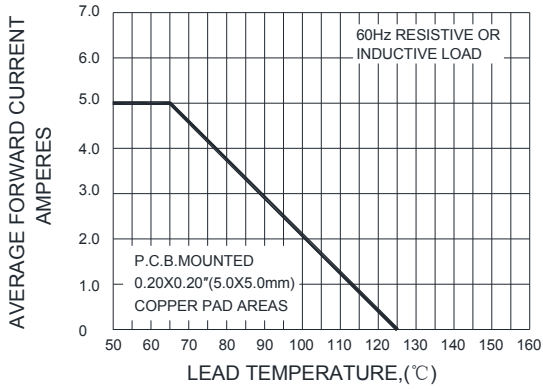
- Ratings at 25°C ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

	SYMBOL	SS 52A	SS 53A	SS 54A	SS 55A	SS 56A	SS 58A	SS 59A	SS 510A	SS 515A	SS 520A	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	150	200	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	63	70	105	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	90	100	150	200	Volts
Maximum Average Forward Rectified Current at $T_L$ see figure 1 $T_L = 65^\circ C$	$I_{(AV)}$	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 @ 2.0A(Note1)	$V_F$	0.50	0.55	0.70	0.85			0.90			Volts	
Maximum DC Reverse Current at rated DC Blocking Voltage per element	$T_A = 25^\circ C$	0.5										mA
	$T_A = 100^\circ C$	20					10					
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55										°C/W
	$R_{\theta JL}$	12										
Operating Junction Temperature	$T_J$	-55 to +125										°C
Storage Temperature Range	$T_{STG}$	-55 to +150										°C

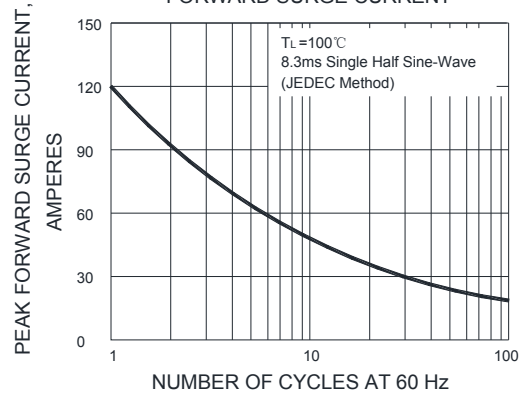
#### Notes:

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

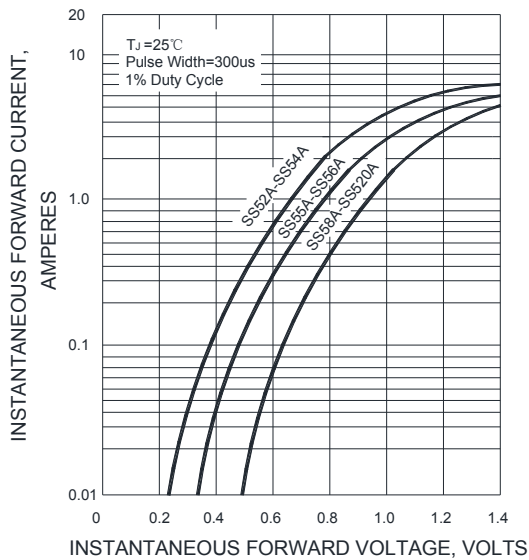
**F1G.1-FORWARD CURRENT DERATING CURVE**



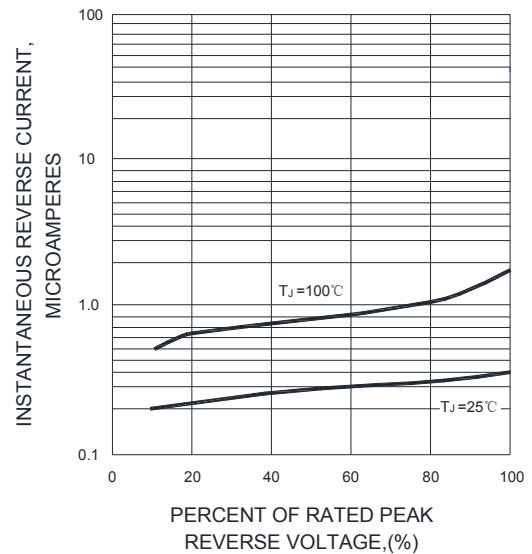
**F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**F1G.4-TYPICAL REVERSE CHARACTERISTICS**



**F1G.5-TYPICAL JUNCTION CAPACITANCE**

