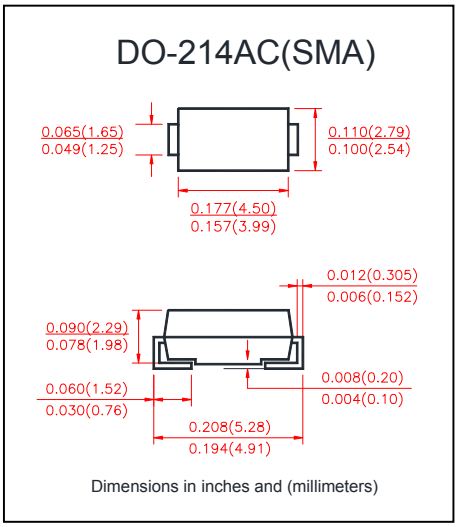
Taiwan Goodark Technology Co.,Ltd

SS52A THRU SS520A

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

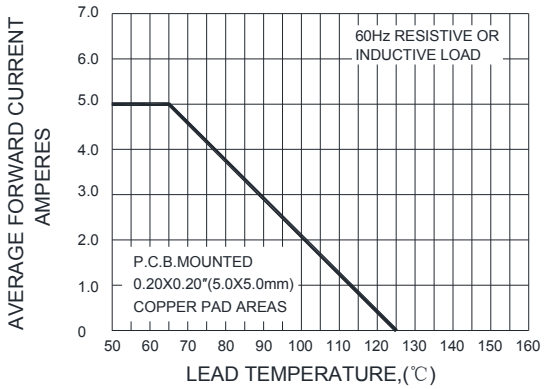
- Ratings at 25℃ ambient temperature unless otherwise specified.
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%.

		SYMBOLS	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℃		$I_{(AV)}$	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℃	I_R	0.5										mA
	T_A = 100℃		20					10					
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	55										℃/W
		$R_{\theta JL}$	12										
Operating Junction Temperature		T_J	-55 to +125										℃
Storage Temperature Range		T_{STG}	-55 to +150										℃

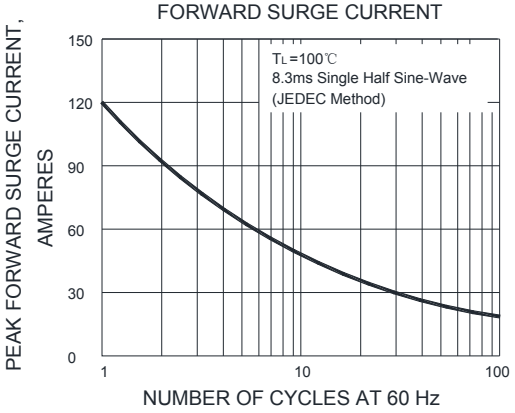
Notes:

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

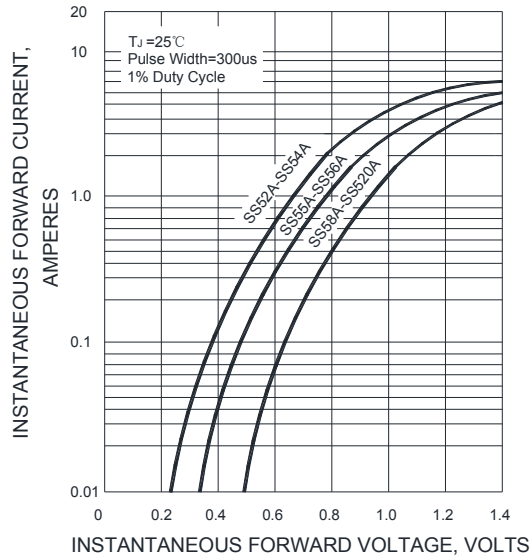
F1G.1-FORWARD CURRENT
DERATING CURVE



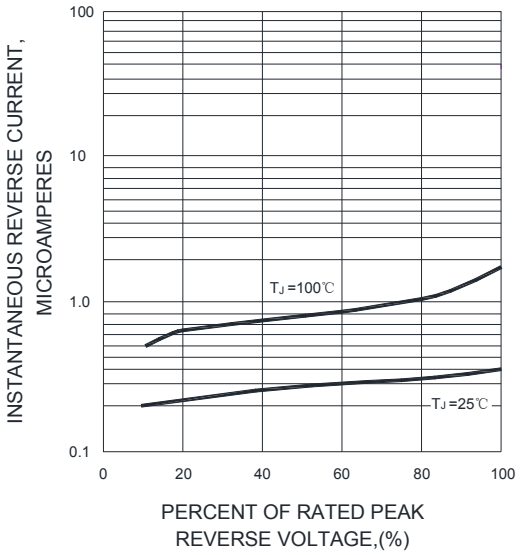
F1G.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE