SS52A THRU SS520A

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE **20 to 200 Volts**

CURRENT **5.0 Ampere**

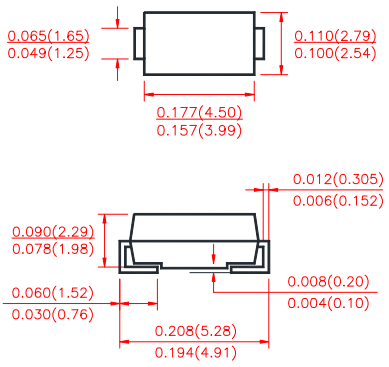
FEATURES

- 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

DO-214AC(SMA)



Dimensions in inches and (millimeters)

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%.

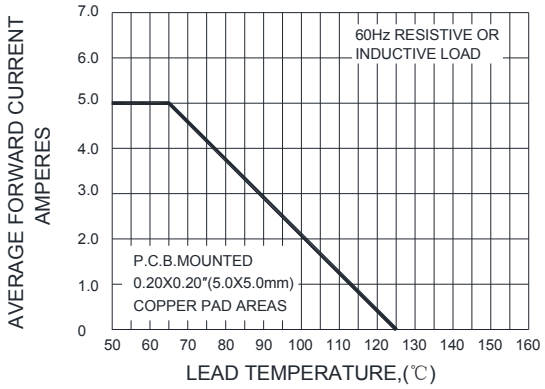
	SYMBOLS	SS 52A	SS 53A	SS 54A	SS 55A	SS 56A	SS 58A	SS 59A	SS 510A	SS 515A	SS 520A	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	Volts
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	105	140	Volts
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	150	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
Maximum DC Reverse Current at rated DC Blocking Voltage per element T_A = 100℃	I_R	20					10					mA
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	55										℃/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	12										℃/W
Operating Junction Temperature	T_J	-55 to +125										℃
Storage Temperature Range	T_{STG}	-55 to +150										℃

Notes:

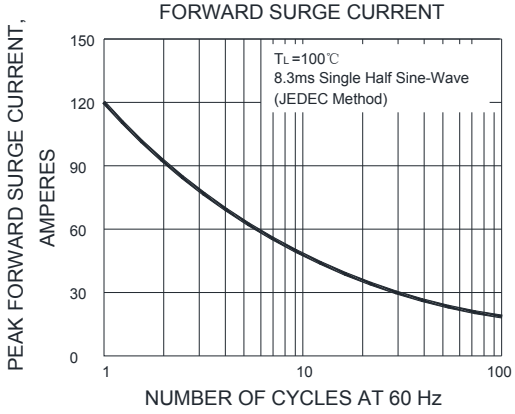
1. Pulse test:300 μ s pulse width,1% duty cycle
2. PCB mounted with 0.2”×0.2”(5.0mm×5.0mm)copper pads

SYMBOLS	SS 52A	SS 53A	SS 54A	SS 55A	SS 56A	SS 58A	SS 59A	SS 510A	SS 515A	SS 520A
MARKING	SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	SS515	SS520

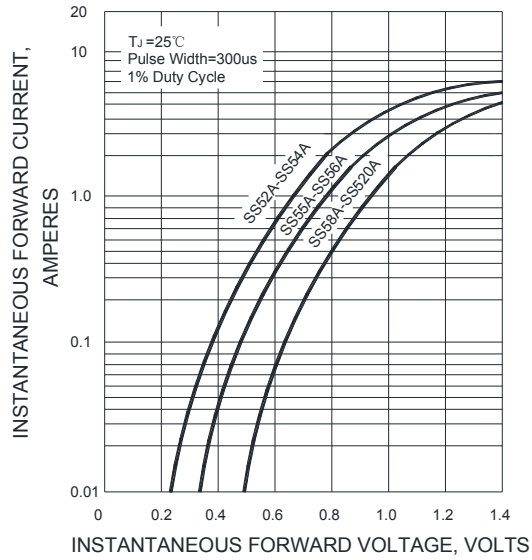
F1G.1-FORWARD CURRENT DERATING CURVE



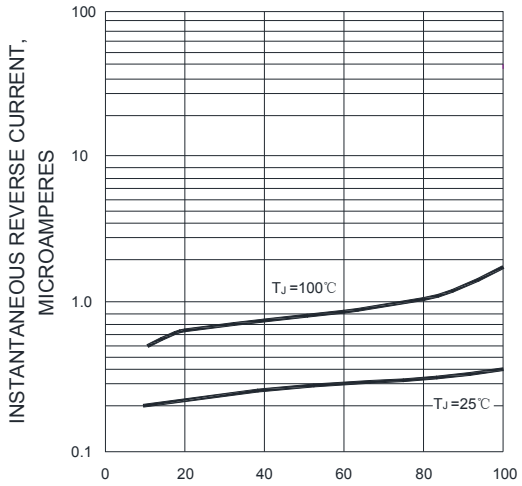
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE