

## FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

## VOLTAGE RANGE

20 to 100 Volts

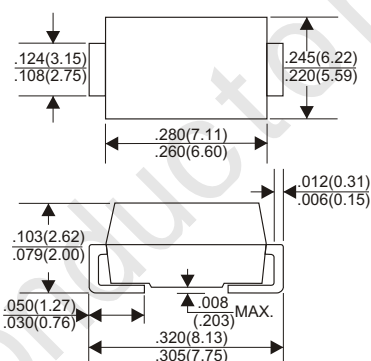
## CURRENT

5.0 Ampere

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams

### DO-214AB(SMC)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SS52	SS53	SS54	SS55	SS56	SS58	SS59	SS510	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =90°C	5.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	180								A
Maximum Instantaneous Forward Voltage at 5.0A	0.55		0.70		0.85				V
Maximum DC Reverse Current at Rated DC Blocking Voltage	Ta=25°C			0.2					mA
	Ta=100°C			20					mA
Typical Junction Capacitance (Note1)	380								pF
Typical Thermal Resistance R <sub>JL</sub> (Note 2)	16								°C/W
Operating Temperature Range T <sub>J</sub>	-65 — +125			-65 — +150					°C
Storage Temperature Range T <sub>STG</sub>	-65 — +150								°C

### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (SS52 THRU SS510)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

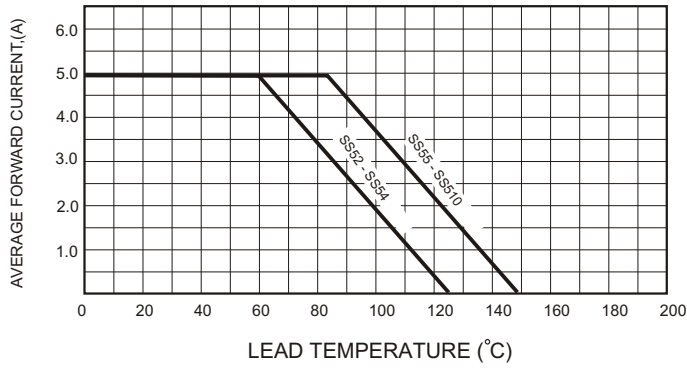


FIG.2-TYPICAL FORWARD CHARACTERISTICS

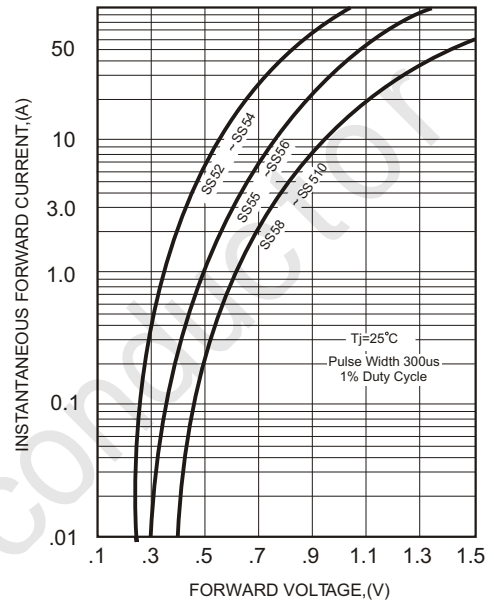


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

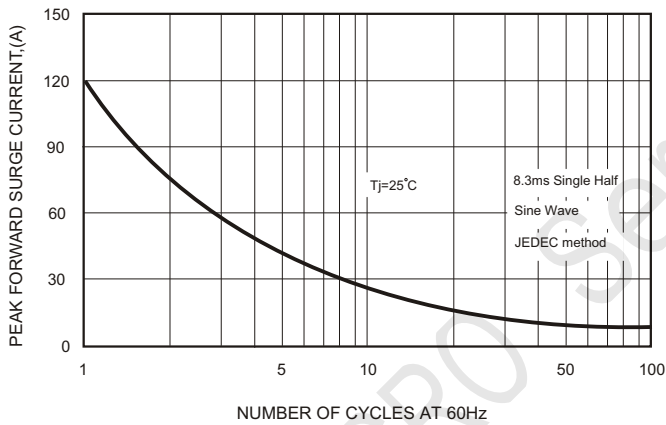


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

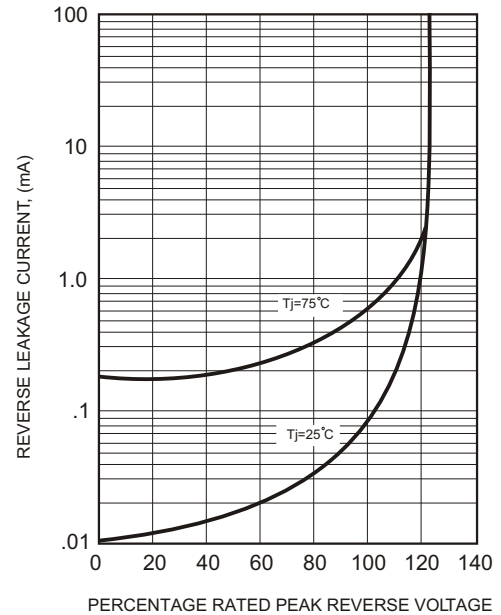


FIG.4-TYPICAL JUNCTION CAPACITANCE

