



### SS52LB THRU SS56LB

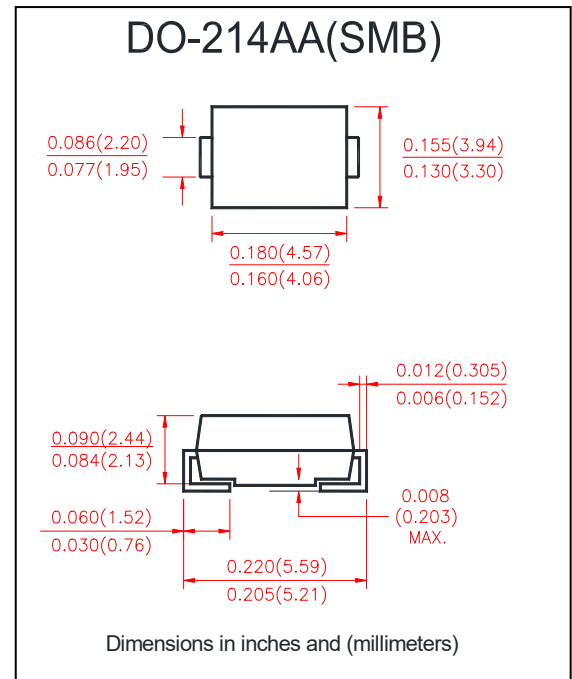
**VOLTAGE RANGE**
**20 to 60Volts**
**CURRENT**
**5.0 Ampere**

## Features

- Low profile surface mount package
- Built-in strain relief
- High switching speed, low  $V_f$
- 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: 0.003 ounce, 0.093 grams



## 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%.

TYPE NUMBER	SYMBOLS	SS52LB	SS53LB	SS54LB	SS55LB	SS56LB	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	Volts
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	Volts
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at $T_L$ See figur.1 $T_L=85^\circ C$	$I_{(AV)}$	5					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 @ 5.0A(Note 1)	$V_F$	0.45			0.55		Volts
Maximum DC Reverse Current at rated DC Blocking voltage per element	$T_A=25^\circ C$	0.5					mA
	$T_A=100^\circ C$	10					
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	75					°C/W
	$R_{\theta JL}$	17					
Operating Junction Temperature	$T_J$	(-55 to +150)					°C
Storage Temperature Rang	$T_{STG}$	(-55 to +150)					°C

### Notes:

1. Pulse test:300μs pulse width,1% duty cycle
2. PCB mounted with 0.2"×0.2"(5.0cm×5.0cm)copper pads



### Ratings and Characteristic Curves (TA=25°C unless otherwise noted)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

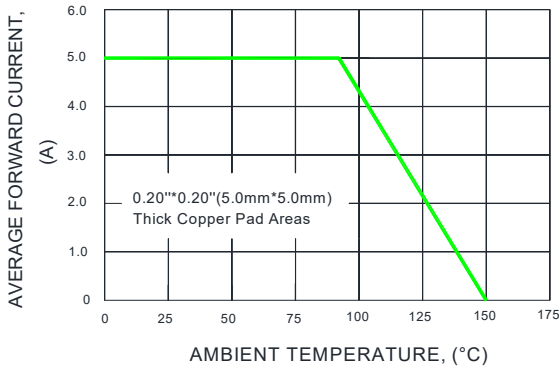


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

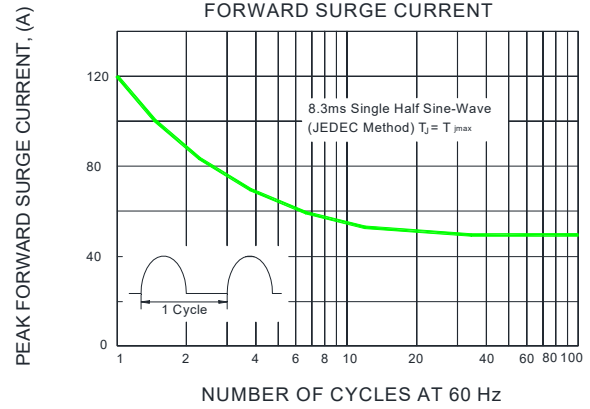


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

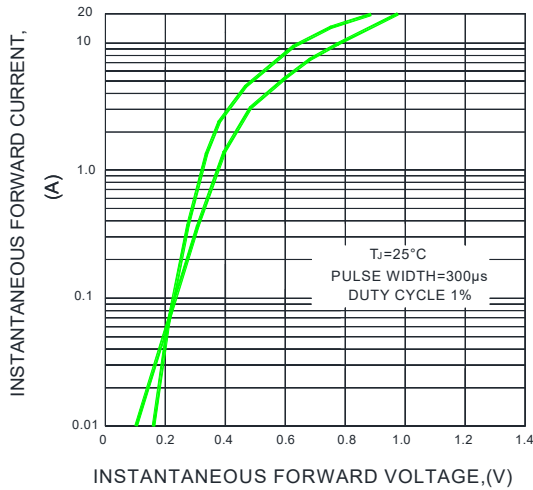


FIG.4-TYPICAL REVERSE CHARACTERISTICS

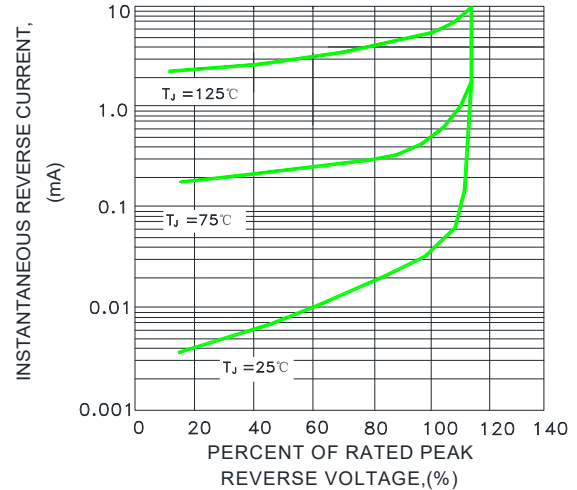


FIG.5-TYPICAL JUNCTION CAPACITANCE

