

# SS52 THRU SS520



## 5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

### MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams
- \* Both normal and Pb free product are available:
- \* Normal: 80~95%Sn, 5~20%Pb
- \* Pb free: 99 Sn above can meet Rohs environment substance directive request

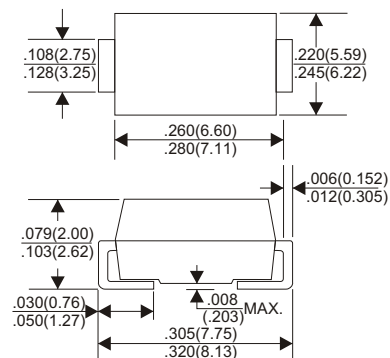
### VOLTAGE RANGE

20 to 200 Volts

### CURRENT

5.0 Ampere

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	SS54	SS56	SS58	SS510	SS515	SS520	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current								
See Fig. 1	5.0							V
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.55	0.70	0.85					V
Maximum DC Reverse Current Ta=25°C	0.2							mA
at Rated DC Blocking Voltage Ta=100°C	20							mA
Typical Junction Capacitance (Note 1)	380							pF
Typical Thermal Resistance R JA (Note 2)	10							°C/W
Operating Temperature Range Tj	-65 — +125		-65 — +150					°C
Storage Temperature Range TSTG	-65 — +150							°C

#### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (SS52 THRU S520)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

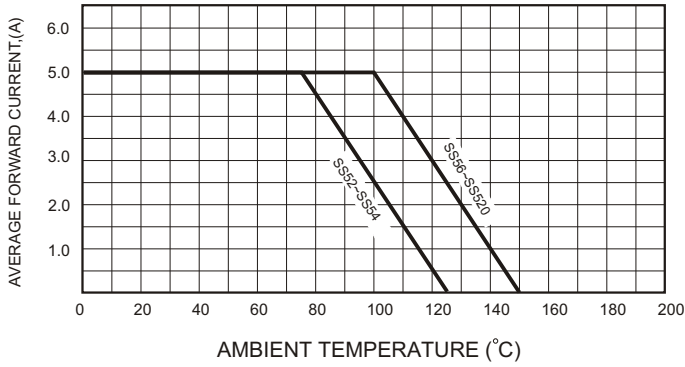


FIG.2-TYPICAL FORWARD CHARACTERISTICS

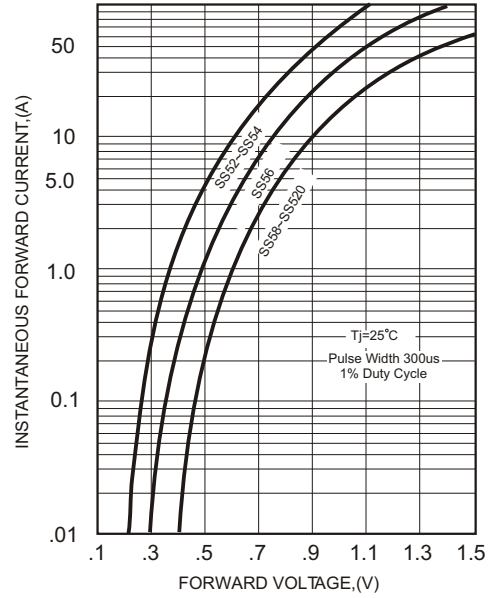


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

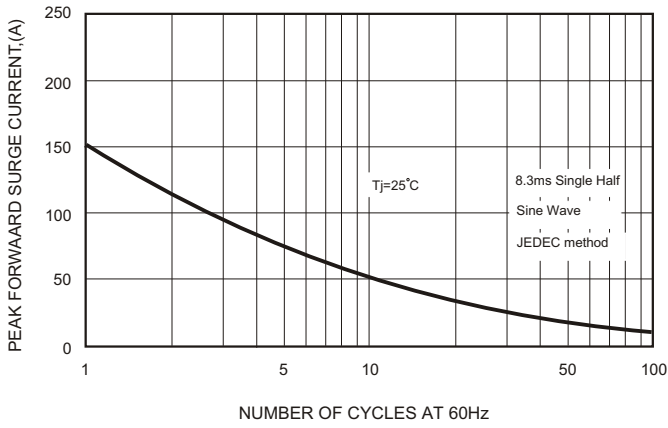


FIG.4-TYPICAL JUNCTION CAPACITANCE

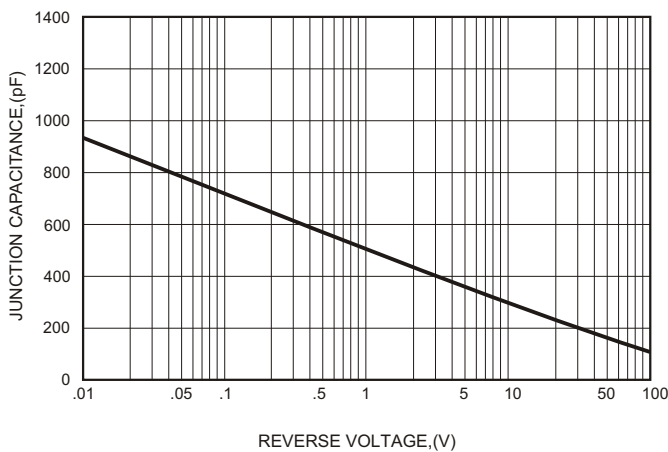


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

