

# 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

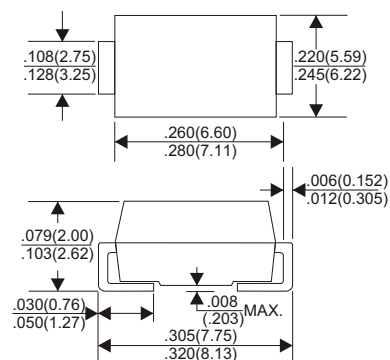
### VOLTAGE RANGE

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

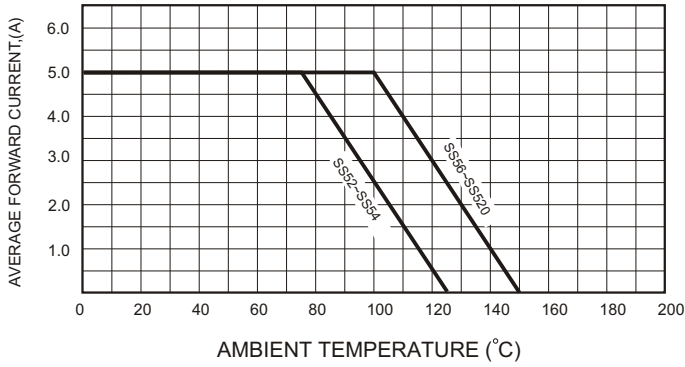


FIG.2-TYPICAL FORWARD CHARACTERISTICS

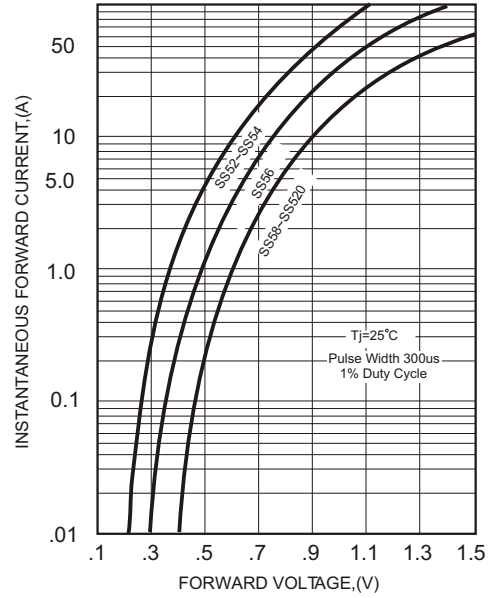


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

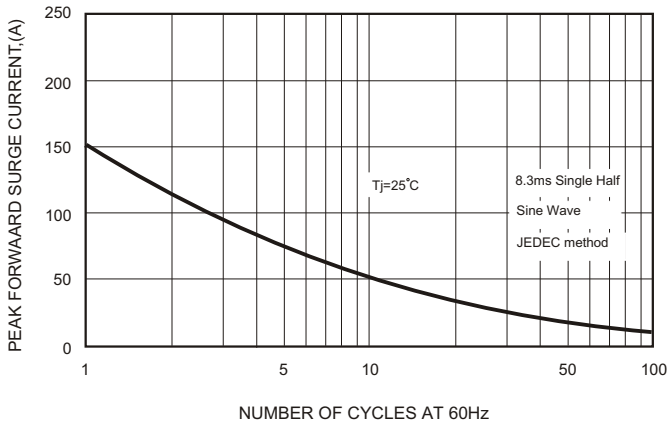


FIG.4-TYPICAL JUNCTION CAPACITANCE

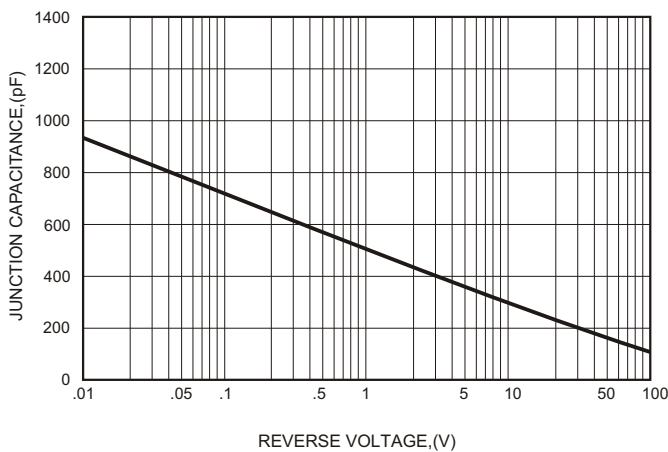


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

