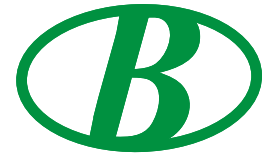


# SS52F THRU SS520F



## 5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### FEATURES

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop
- \* Lead Free Finish/RoHS Compliant

### 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: 0.064 grams

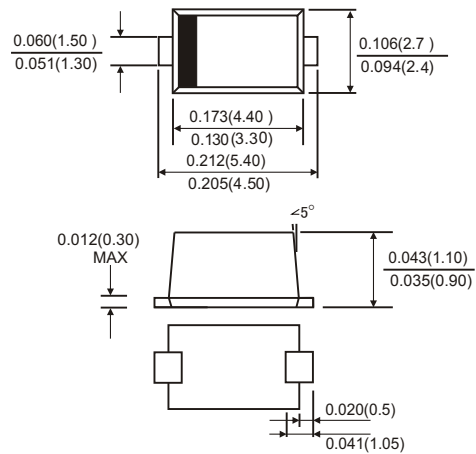
### VOLTAGE RANGE

20 to 200 Volts

### CURRENT

5.0 Ampere

### SMAFL



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	SS52F	SS54F	SS55F	SS56F	SS58F	SS510F	SS520F	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	50	60	80	100	200	V
Maximum RMS Voltage	14	28	35	42	56	70	140	V
Maximum DC Blocking Voltage	20	40	50	60	80	100	200	V
Maximum Average Forward Rectified Current	5.0							A
See Fig.1								
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	0.95				V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$	500							$\mu\text{A}$
at Rated DC Blocking Voltage $T_a=100^\circ\text{C}$	20							mA
Typical Junction Capacitance (Note1)	170							pF
Typical Thermal Resistance R <sub>JA</sub> (Note 2)	70							$^\circ\text{C}/\text{W}$
Operating Temperature Range T <sub>J</sub>	-65— +125		-65— +150					$^\circ\text{C}$
Storage Temperature Range T <sub>STG</sub>	-65— +150							$^\circ\text{C}$

#### NOTES:

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

## RATING AND CHARACTERISTIC CURVES (SS52A THRU SS5200A)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

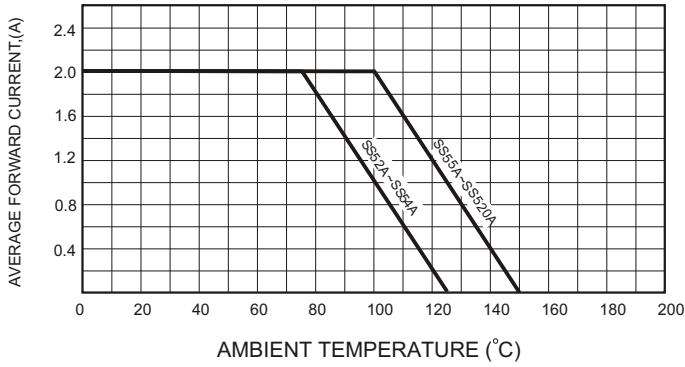


FIG.2-TYPICAL FORWARD CHARACTERISTICS

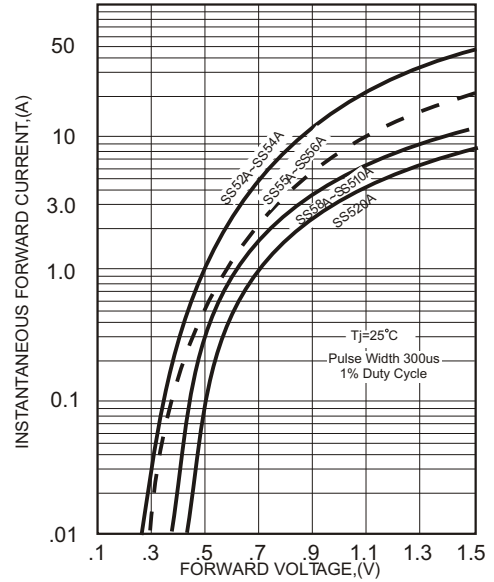


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

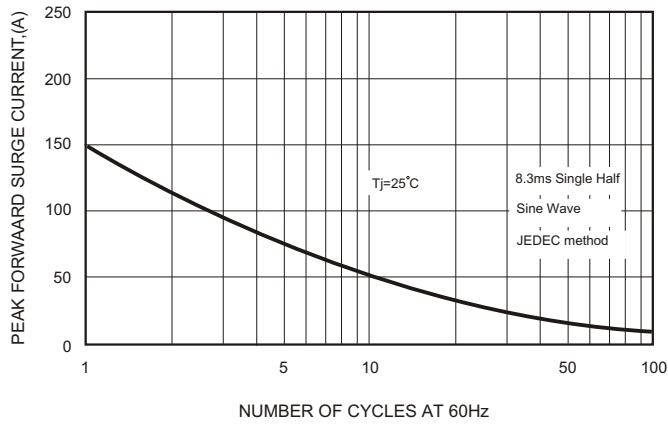


FIG.4-TYPICAL JUNCTION CAPACITANCE

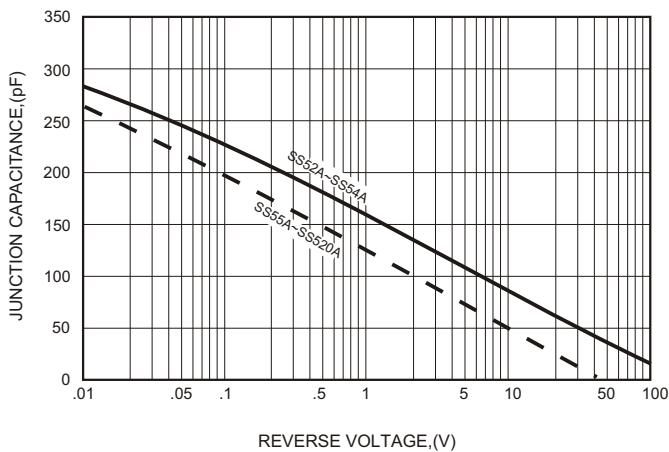


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

