

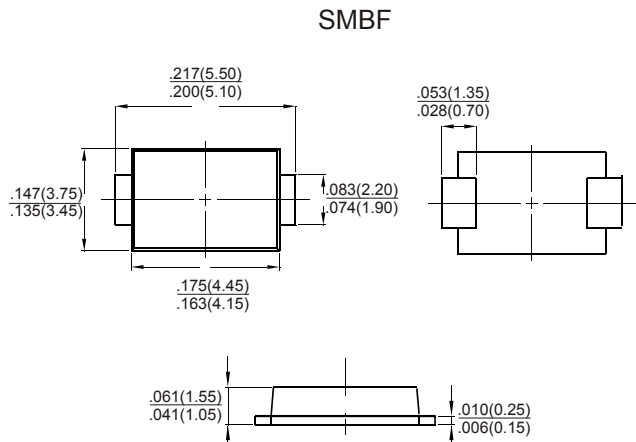
## 5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

### 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



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	SS52BF	SS54BF	SS56BF	SS58BF	SS510BF	SS515BF	SS520BF	UNITS
Marking Code	S52B SS52F	S54B SS54F	S56B SS56F	S58B SS58F	S510B SS510F	S515B SS515F	S520B SS520F	-
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							A
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 (Note1)	380							pF
Typical Thermal Resistance R JA (Note 2)	10							°C/W
Operating Temperature Range Tj	-65 — +150							°C
Storage Temperature Range TSTG	-65 — +150							°C

**NOTES:**

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

**RATING AND CHARACTERISTIC CURVES (SS52BF THRU S520BF)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

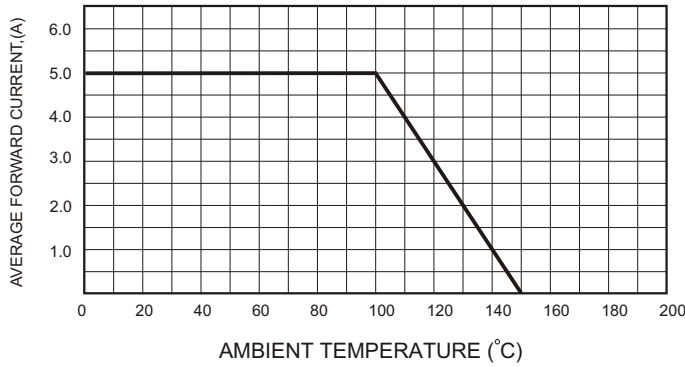


FIG.2-TYPICAL FORWARD CHARACTERISTICS

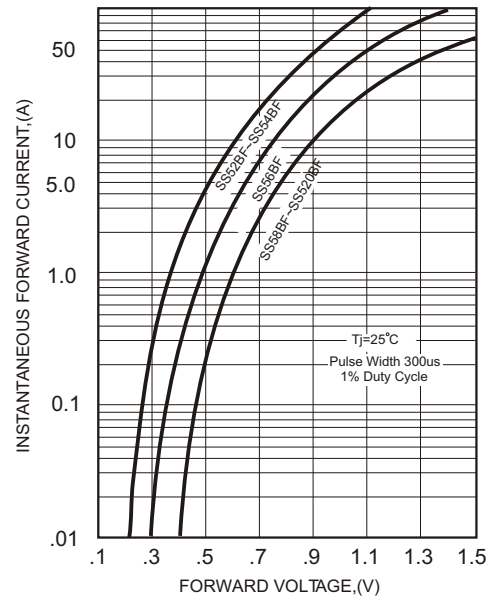


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

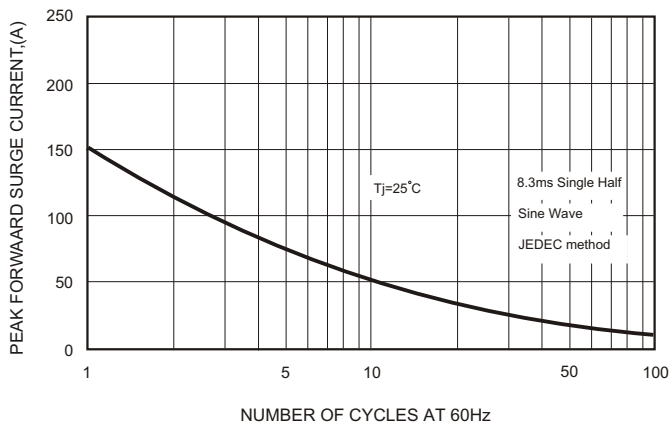


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

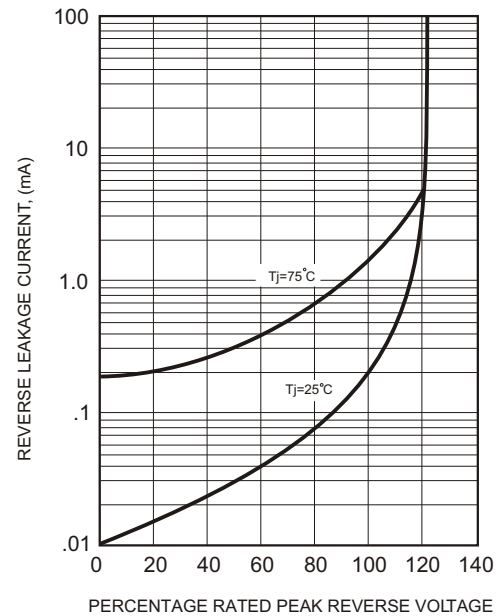


FIG.4-TYPICAL JUNCTION CAPACITANCE

