SS52BF THRU SS510BF

5.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE
20 to 100 Volts
CURRENT
5.0 Ampere

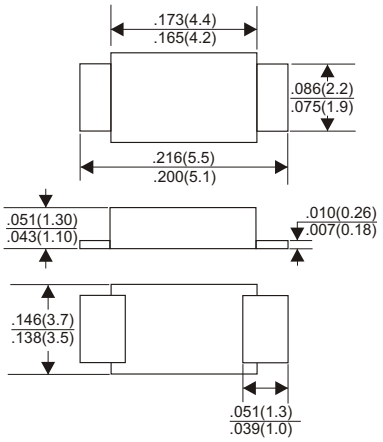
FEATURES

* Ideal for surface mount applications
* Easy pick and place
* Built-in strain relief
* Low forward voltage drop

MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Metallurgically bonded construction
* Polarity: Color band denotes cathode end
* Mounting position: Any

SMBF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SS52BF	SS53BF	SS54BF	SS55BF	SS56BF	SS58BF	SS59BF	SS510BF	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current At T_L=100°C	5.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	120								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 JL (Note 2)	10								°C/W
Operating Temperature Range T_J	-65 —+125			-65 —+150					°C
Storage Temperature Range T_{STG}	-65— +150								°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Lead.

RATING AND CHARACTERISTIC CURVES (SS52BF THRU SS510BF)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

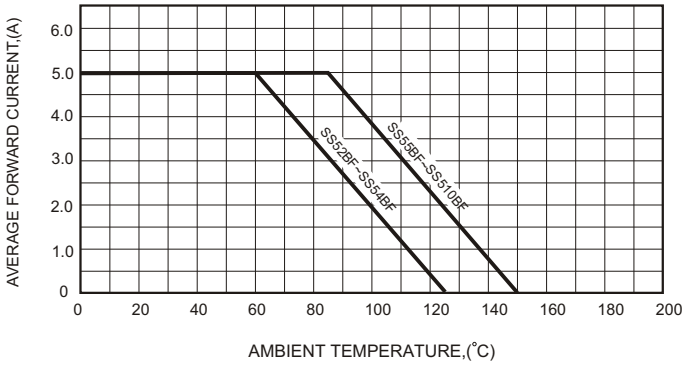


FIG.2-TYPICAL FORWARD CHARACTERISTICS

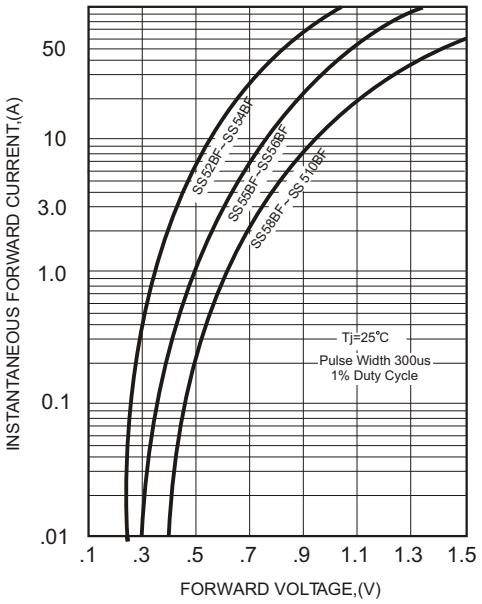


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

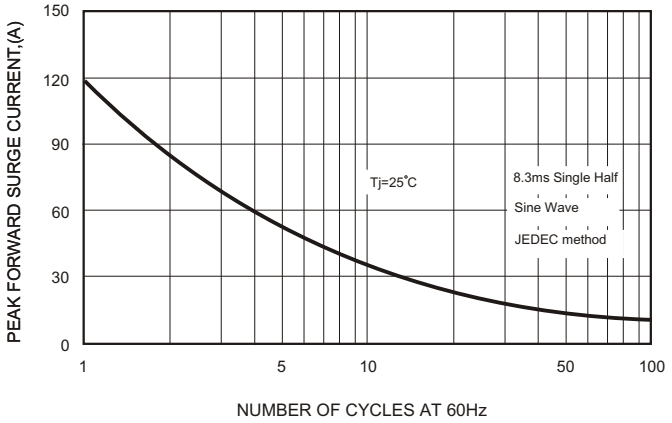


FIG.4-TYPICAL JUNCTION CAPACITANCE

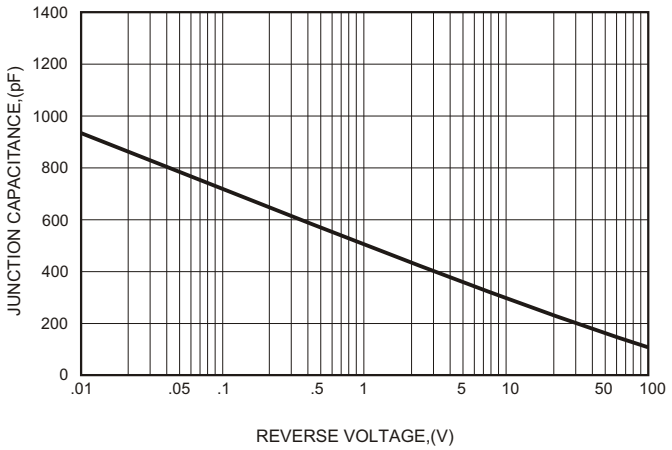
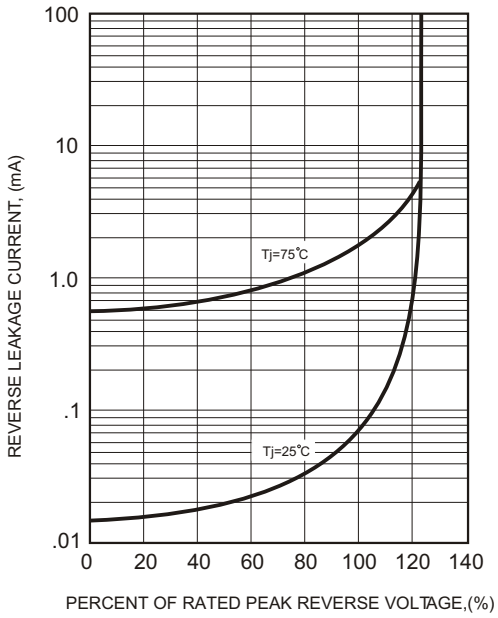



FIG.5 - TYPICAL REVERSE CHARACTERISTICS