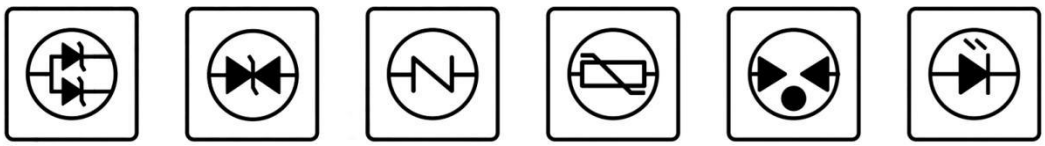
MSKSEMI
SEMICONDUCTOR



Product data sheet

VOLTAGE RANGE

20 to 100 Volts

CURRENT

5.0 Ampere

SMAF

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

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%.

P/N(MARK)	SS52F	SS53F	SS54F	SS55F	SS56F	SS58F	SS59F	SS510F	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	0.1					0.02			mA
at Rated DC Blocking Voltage Ta=100˚C	5					2			mA
Typical Junction Capacitance (Note1)	380								pF
Typical Thermal Resistance R JL (Note 2)	10								˚C/W
Operating Temperature Range T_J	-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 (SS52F THRU SS510F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

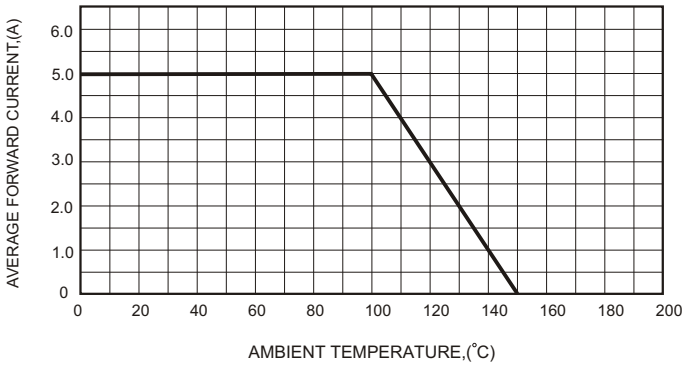


FIG.2-TYPICAL FORWARD CHARACTERISTICS

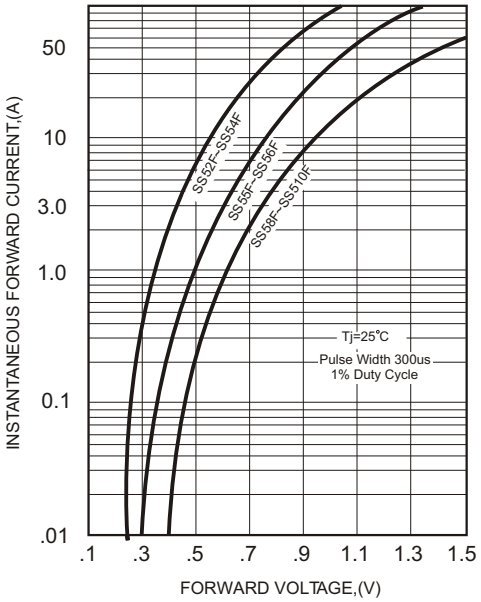


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

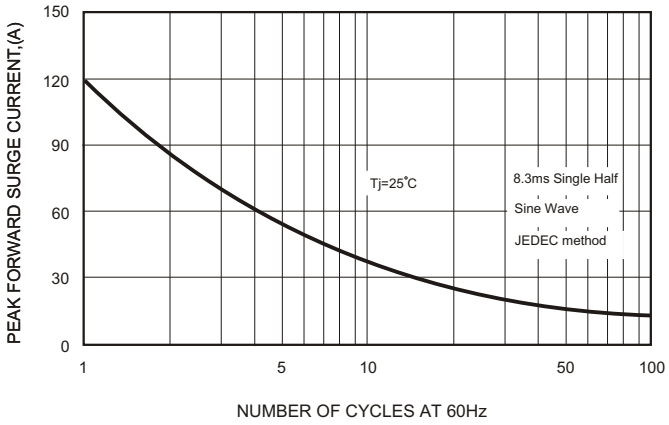


FIG.4-TYPICAL JUNCTION CAPACITANCE

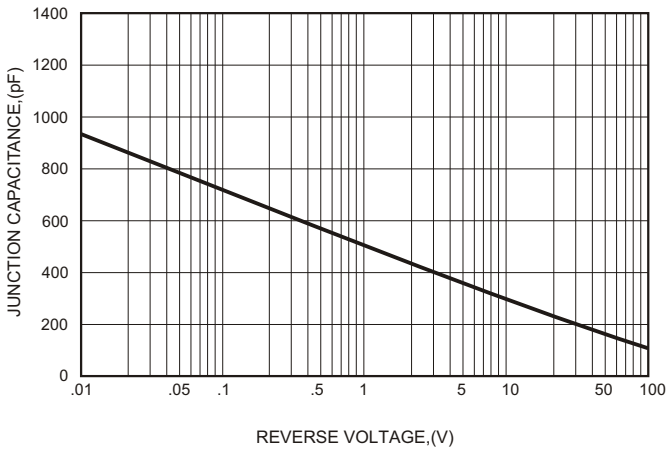
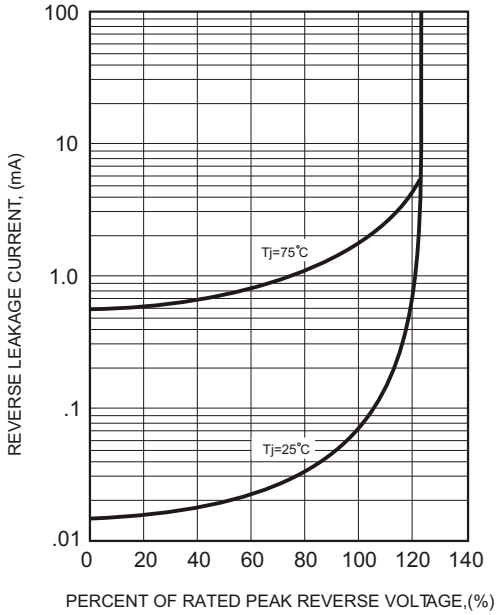
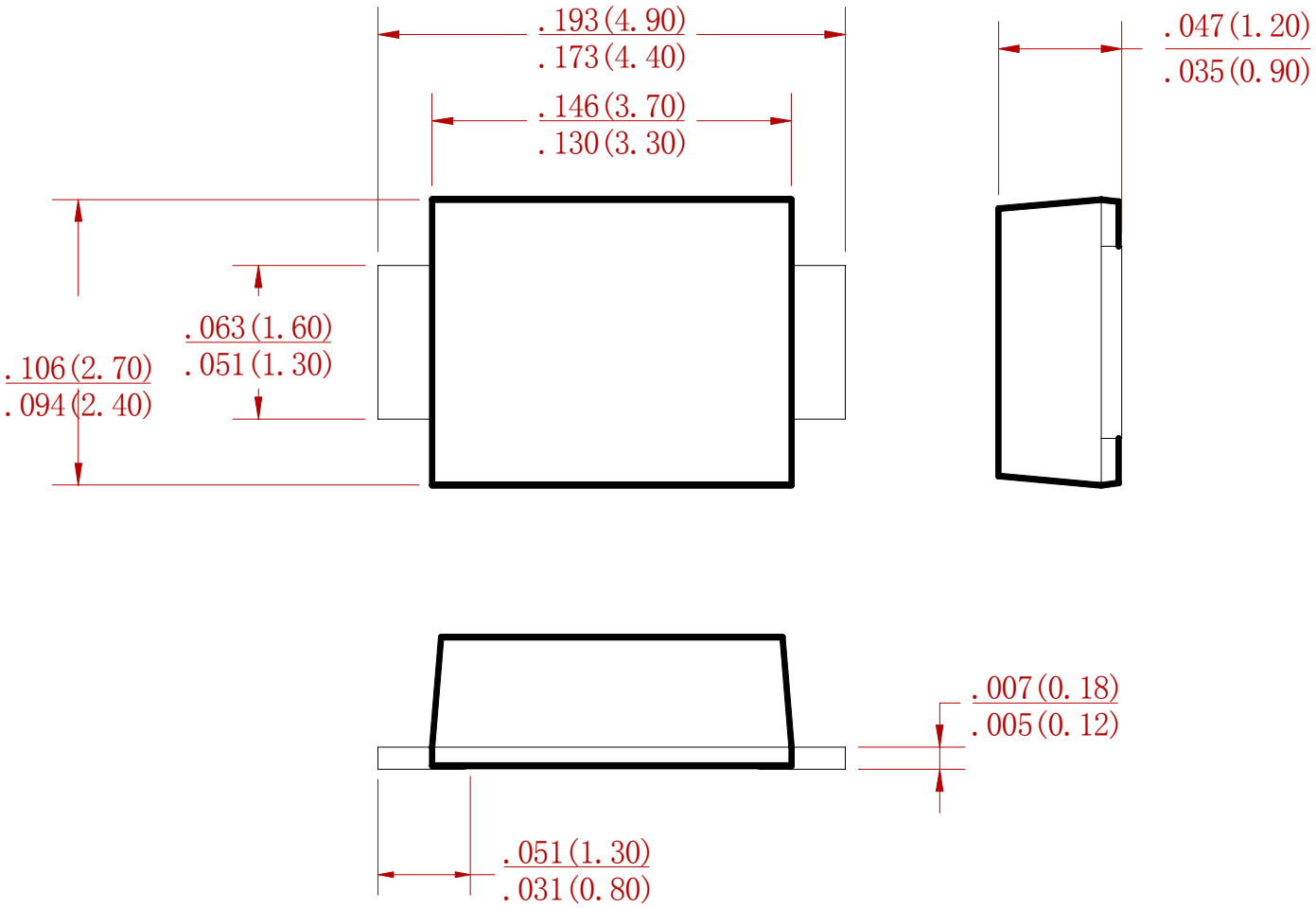


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



PACKAGE MECHANICAL DATA



Dimensions in inches and (millimeters)

REEL SPECIFICATION

P/N	PKG	QTY
SS52F THRU SS510F	SMAF	3000

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