GOODWORK

# SS12F THRU SS110F

## 1.0 AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE RANGE
20 to 100 Volts
CURRENT
1.0 Ampere

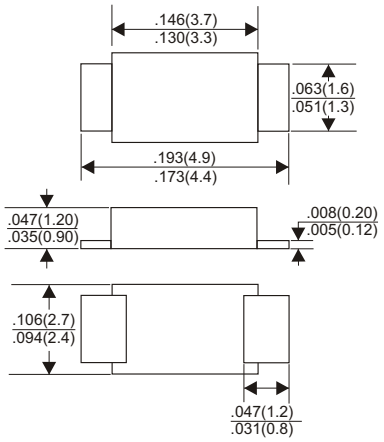
## FEATURES

* 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

**SMAF**




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 | SS12F | SS13F | SS14F | SS15F | SS16F | SS18F | SS19F | SS110F | 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 See Fig. 1 | 1.0 | | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 30 | | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 1.0A | 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 | 10 | | | | | | | | mA |
| Typical Junction Capacitance (Note1) | 110 | | | | | | | | pF |
| Typical Thermal Resistance R JA (Note 2) | 50 | | | | | | | | ˚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 (SS12F THRU SS110F)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

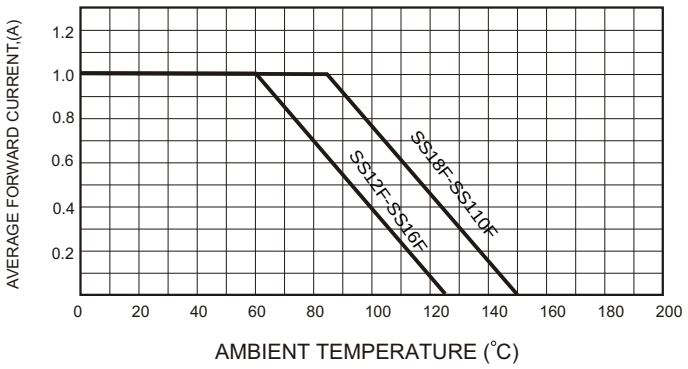



FIG.2-TYPICAL FORWARD CHARACTERISTICS

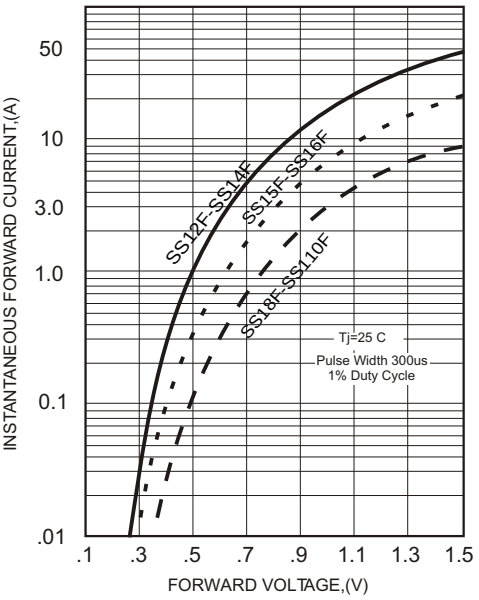



FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

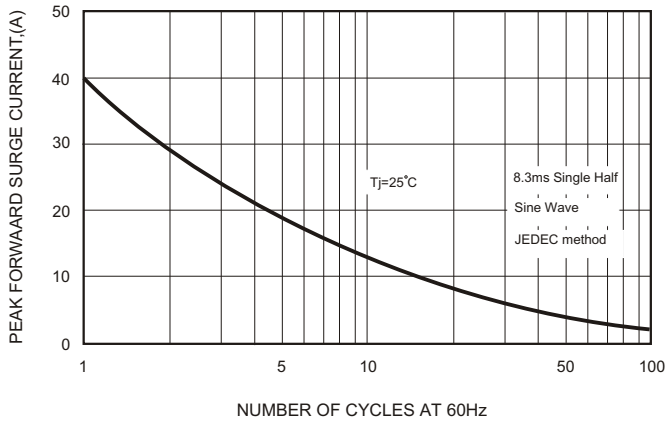



FIG.4-TYPICAL JUNCTION CAPACITANCE

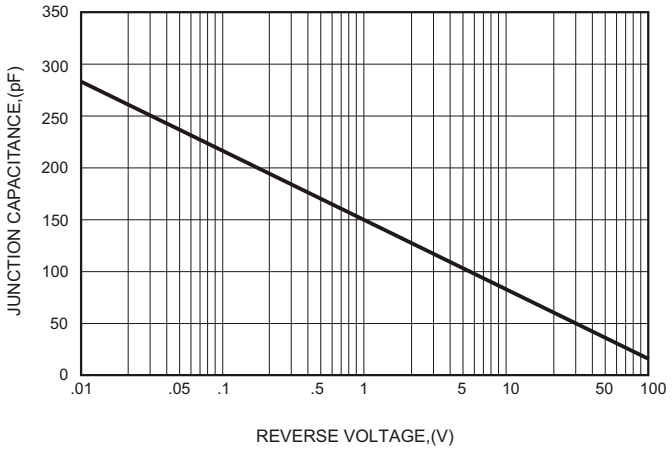



FIG.5 - TYPICAL REVERSE CHARACTERISTICS