

SS12LF~SS110LF

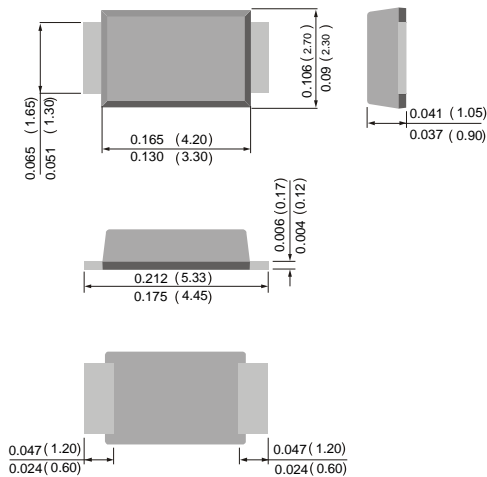
LOW VF SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 100 Volts **CURRENT** 1.0 Ampere



SMAF

Unit: inch (mm)

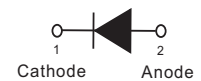


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications.
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC SMAF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Resistive or inductive load.

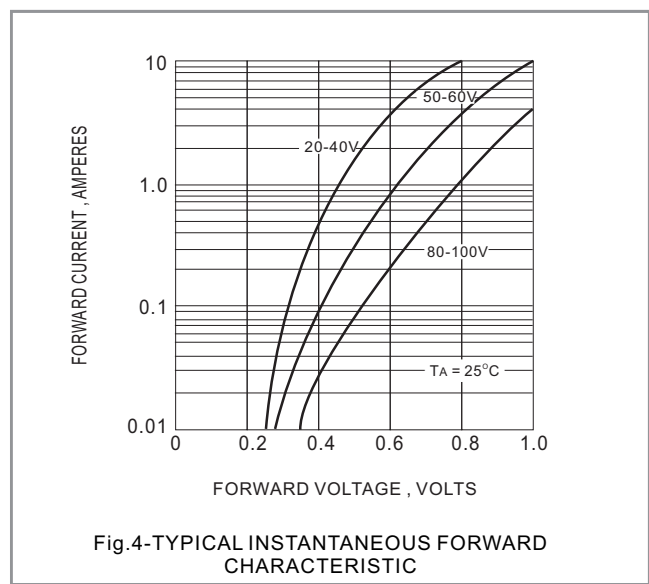
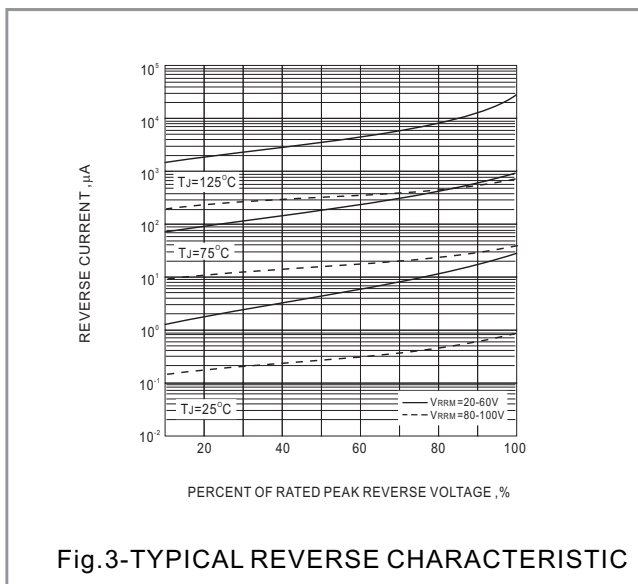
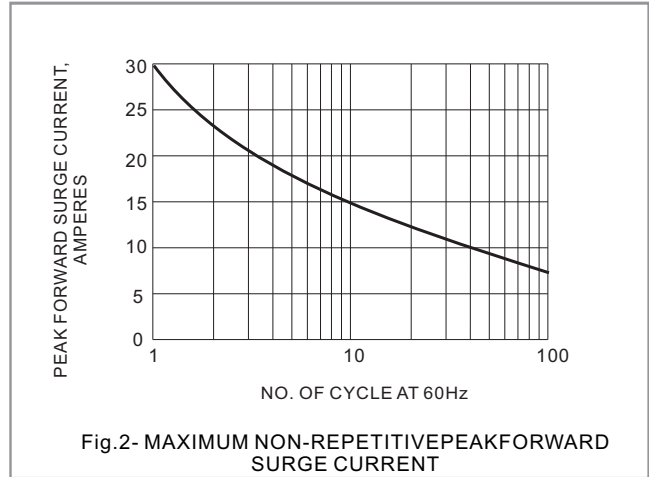
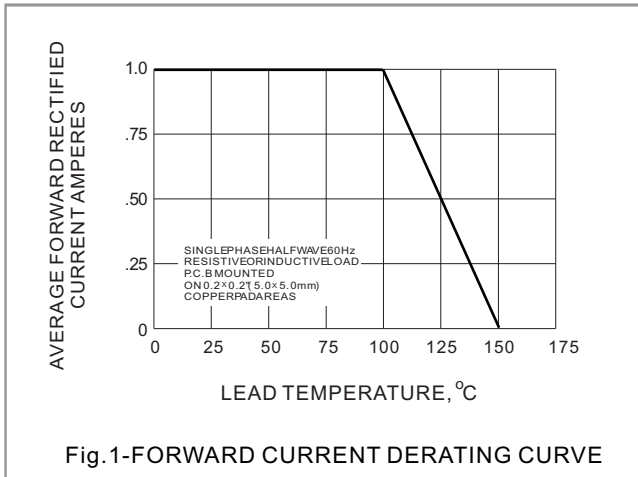
| PARAMETER | SYMBOL | SS12LF | SS13LF | SS14LF | SS15LF | SS16LF | SS18LF | SS19LF | SS110LF | UNITS | |
|--|------------------------------------|-------------|--------|--------|--------|--------|--------|--------|---------|------------------|-----------------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V | |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 63 | 70 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | V | |
| Maximum Average Forward Current at $T_L=75^\circ\text{C}$ | $I_{F(AV)}$ | 1 | | | | | | | | A | |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 30 | | | | | | | | A | |
| Maximum Forward Voltage at 1A (Note 1) | V_F | 0.45 | | 0.55 | | 0.72 | | | | V | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | | | | | 0.2 | | | | | mA |
| | | | | | | 20 | | | | | |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$ $R_{\theta JA}$ | | | | | 28 | | | | | $^\circ\text{C} / \text{W}$ |
| | | | | | | 88 | | | | | |
| Operating Junction Temperature Range | T_J | -55 to +150 | | | | | | | | $^\circ\text{C}$ | |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | $^\circ\text{C}$ | |

NOTES:

1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 5.0mm² (.013mm thick) copper pad areas.

SS12LF~SS110LF

RATING AND CHARACTERISTIC CURVES



The cruve graph is for reference only, can't be the basis for judgment