



GP
ELECTRONICS

SS52F-SS520F

20~200V-1A Schottky Rectifier

SS52F-SS520F Schottky Rectifier

Feature

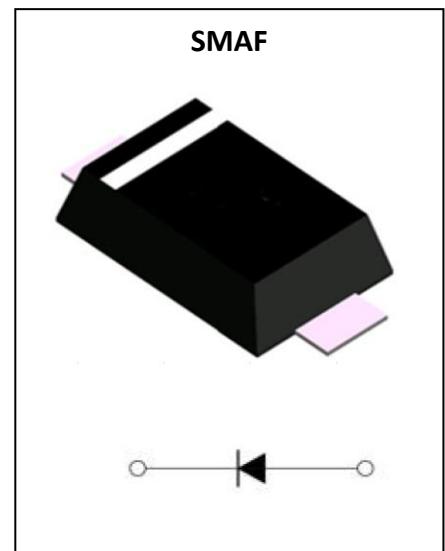
- High current capability
- Low VF
- High surge current capability

Application

- Rectifier

Marking

- SS52-SS520



ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | SS5 | | | | | | | | | Unit |
|---|-------------|------------|----|----|------------|----|-----|-----|-----|-----|------|
| | | 2F | 3F | 4F | 5F | 6F | 8F | 10F | 15F | 20F | |
| Repetitive Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Average Forward Current(60HZ Half-sine wave, Resistance load, TL(Fig.1)) | $I_{F(AV)}$ | | | | | | 5.0 | | | | A |
| Non-repetitive Peak Forward Surge Current (60Hz Half-sine wave ,1 cycle , $T_a=25^\circ\text{C}$) | I_{FSM} | | | | | | 150 | | | | A |
| Junction Temperature | T_J | -65 ~ +125 | | | -65 ~ +150 | | | | | | |
| Storage Temperature | T_{STG} | -65 ~ +150 | | | | | | | | | °C |

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise noted)

| Parameter | Symbol | Test Condition | SS5 | | | | | | | | Unit | |
|------------------------------|------------------|-------------------------------|-------------------------|----|------|----|------|-----|------|-----|------|---|
| | | | 2F | 3F | 4F | 5F | 6F | 8F | 10F | 15F | | |
| Peak Forward Voltage | V_F | $I_F = 1\text{A}$ | | | 0.55 | | 0.70 | | 0.85 | | 0.95 | V |
| Peak Reverse Current | I_{RRM1} | $V_{RM}=V_{RRM}$ | $T_a=25^\circ\text{C}$ | | 0.5 | | | 0.2 | | | mA | |
| | I_{RRM2} | | $T_a=100^\circ\text{C}$ | | 20 | | | 10 | | | mA | |
| Thermal Resistance (Typical) | $R_{\theta J-A}$ | Between junction and ambient | | | | 55 | | | | | °C/W | |
| | $R_{\theta J-L}$ | Between junction and terminal | | | | 17 | | | | | °C/W | |

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

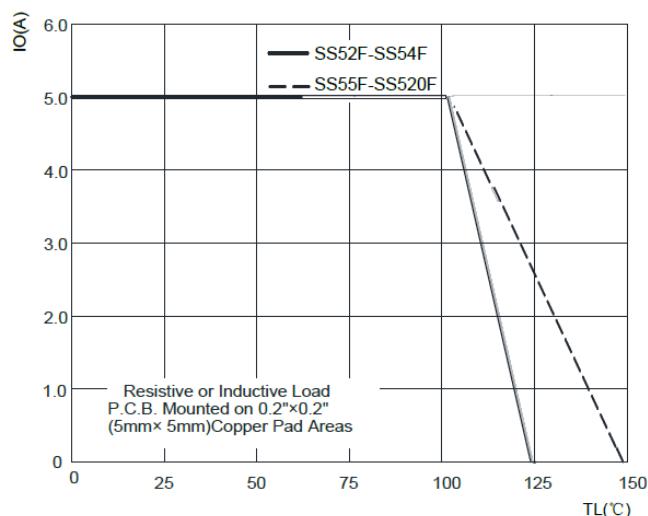


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

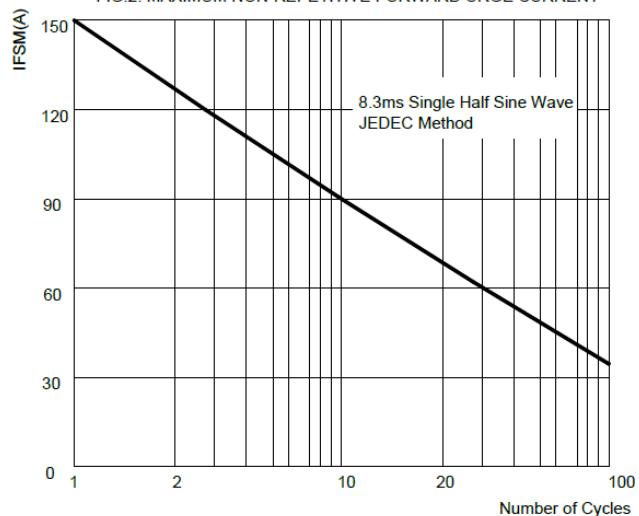


FIG.3: TYPICAL FORWARD CHARACTERISTICS

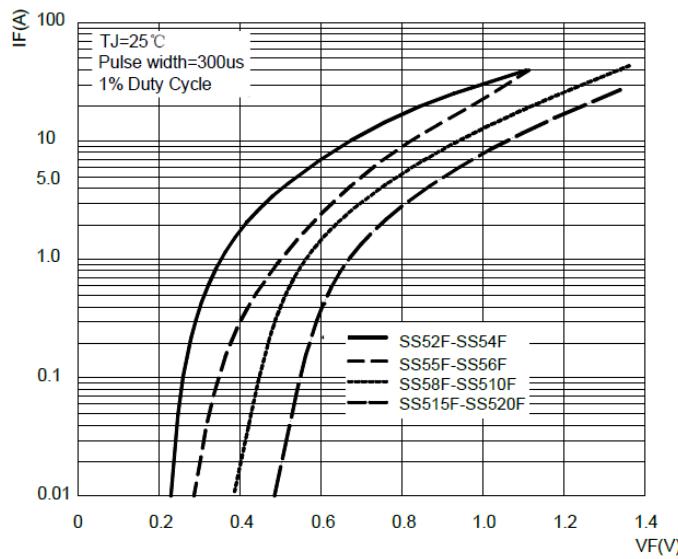
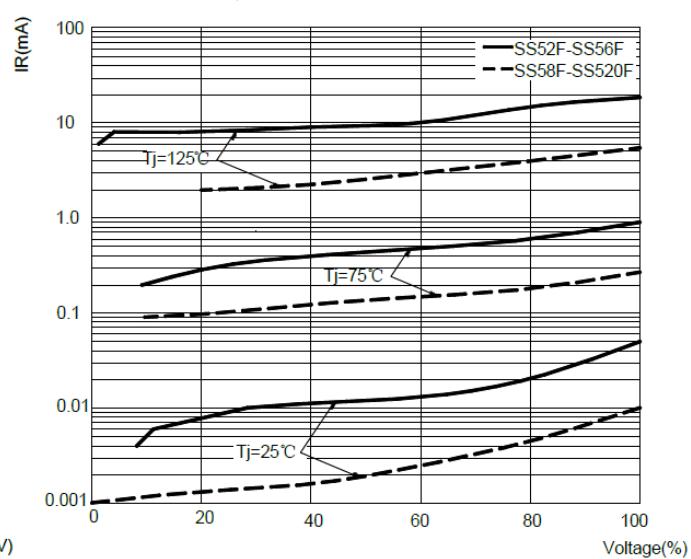
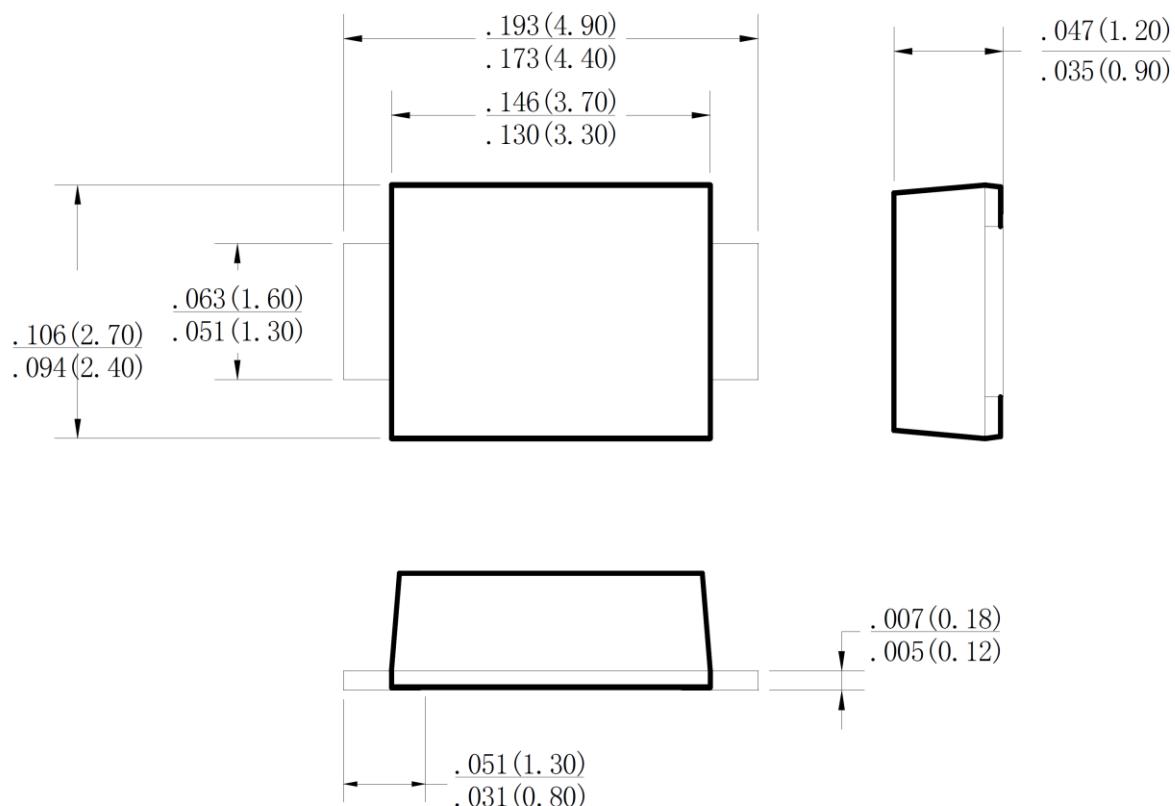


FIG.4: TYPICAL REVERSE CHARACTERISTICS



SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)