

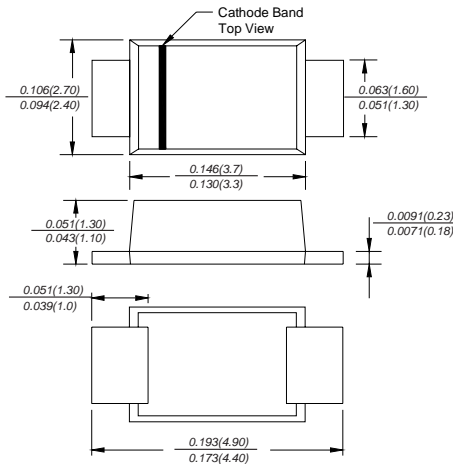


SS32F THRU SS3200F

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Ampere

SMAF



Dimensions in inches and (millimeters)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 260°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC SMAF molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0018 ounce, 0.064 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| MDD Catalog Number | SYMBOLS | SS32F | SS33F | SS34F | SS35F | SS36F | SS38F | SS310F | SS3150F | SS3200F | UNITS | |
|---|-----------------|-------------|-------|-------|-------|-------|-------------|--------|---------|---------|-------|----|
| Maximum repetitive peak reverse voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS | |
| Maximum RMS voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | VOLTS | |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | VOLTS | |
| Maximum average forward rectified current at T_L (see fig.1) | $I_{(AV)}$ | 3.0 | | | | | | | | | Amp | |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 80.0 | | | | | | | | | Amps | |
| Maximum instantaneous forward voltage at 3.0A | V_F | 0.55 | | | 0.70 | | | 0.85 | | 0.95 | Volts | |
| Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=100^\circ\text{C}$ | I_R | 0.5 | | | | | | 0.2 | | | mA | |
| | | 20.0 | | | 10 | | | 2.0 | | | | |
| Typical junction capacitance (NOTE 1) | C_J | 500 | | | 300 | | | | | | pF | |
| Typical thermal resistance (NOTE 2) | $R_{\theta JA}$ | 55.0 | | | | | | | | | °C/W | |
| Operating junction temperature range | T_J | -50 to +125 | | | | | -50 to +150 | | | | | °C |
| Storage temperature range | T_{STG} | -50 to +150 | | | | | | | | | | °C |

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

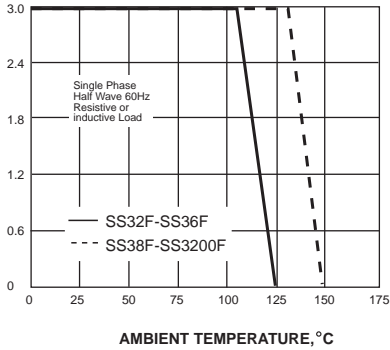


www.microdiode.com

RATINGS AND CHARACTERISTIC CURVES SS32F THRU SS3200F

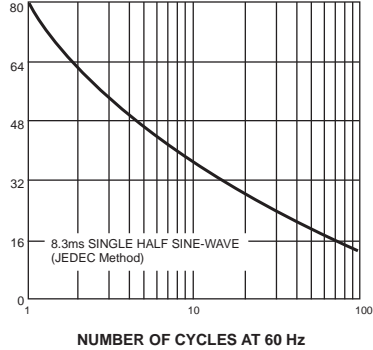
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



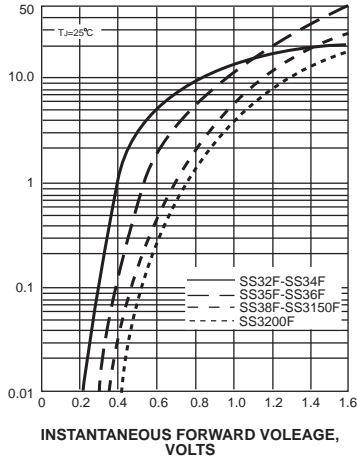
PEAK FORWARD SURGE CURRENT, AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



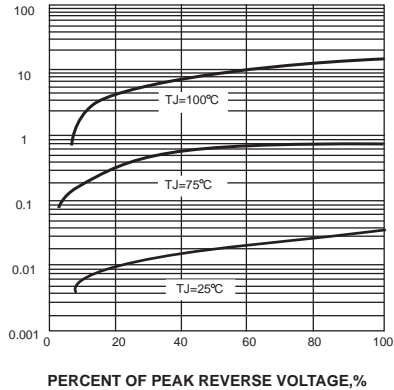
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



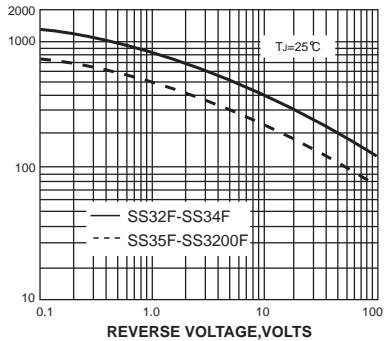
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



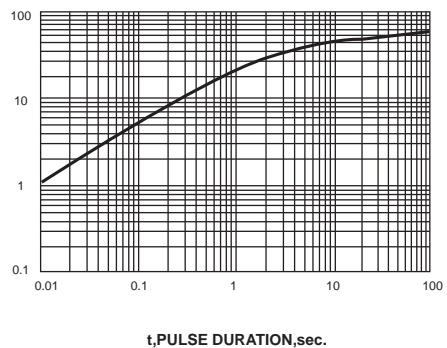
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

