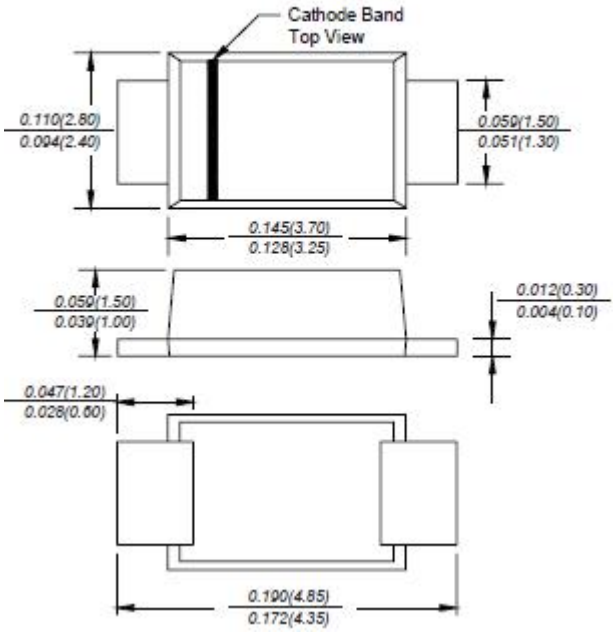
# SS32F thru SS320F

## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low power loss,high efficiency
- Built-in strain relief,ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed: 250 C/10 seconds at terminals

## Mechanical Data

- Case: JEDEC SMAF molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight : 0.0014 ounce, 0.038 grams




Dimensions in inches and (millimeters)

## Maximum Ratings And Electrical Characteristics

Ratings at 25 C ambient te mperature unless otherwise speci fied. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

| | *SYMBOLS* | SS32AF SK32AF | SS33AF SK33AF | SS34AF SK34AF | SS35AF SK35AF | SS36AF SK36AF | SS38AF SK38AF | SS310AF SK310AF | SS3150AF SK3150AF | SS320AF SK320AF | 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 | 150 | 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 | | | | | | | | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | $I_{FSM}$ | 100.0 | | | | | | | | | 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 C at rated DC blocking voltage T**A**=100 C | $I_R$ | 0.5 | | | | | | | 0.2 | | mA |
| | | 20 | | | | | 10 | | 2.0 | | |
| Typical junction capacitance (NOTE 1) | $C_J$ | 500 | | | 300 | | | | | | pF |
| Typical thermal resistance (NOTE 2) | $R_{qJA}$ | 55.0 | | | | | | | | | ℃/W |
| Operating junction temperature range | $T_{J,}$ | -65 to +125 | | | | | -65 to +150 | | | | ℃ |
| Storage temperature range | $T_{STG}$ | -65 to +150 | | | | | | | | | ℃ |

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



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## Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

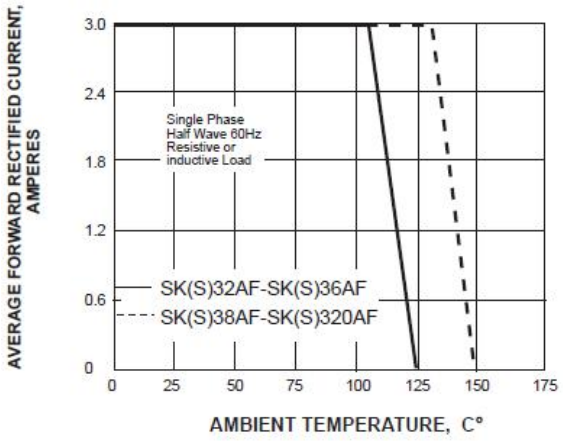



FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

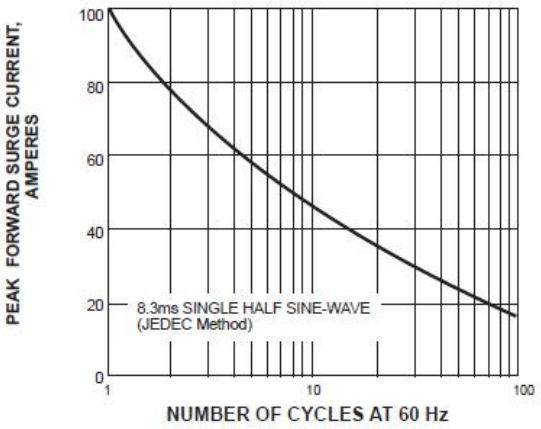



FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

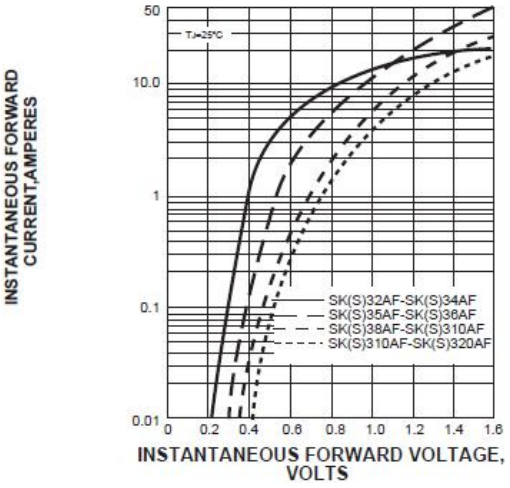



FIG. 4-TYPICAL REVERSE CHARACTERISTICS

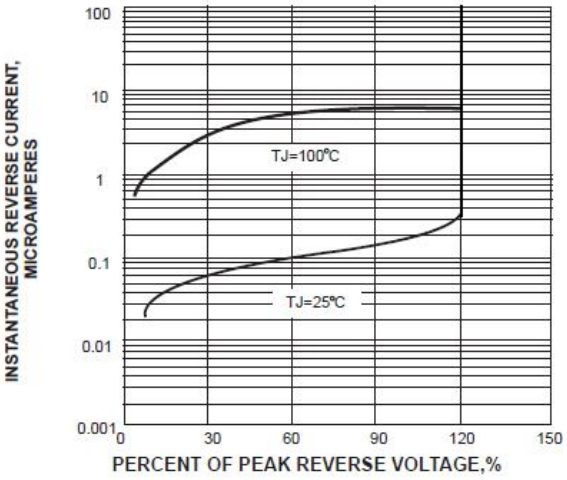



FIG. 5-TYPICAL JUNCTION CAPACITANCE

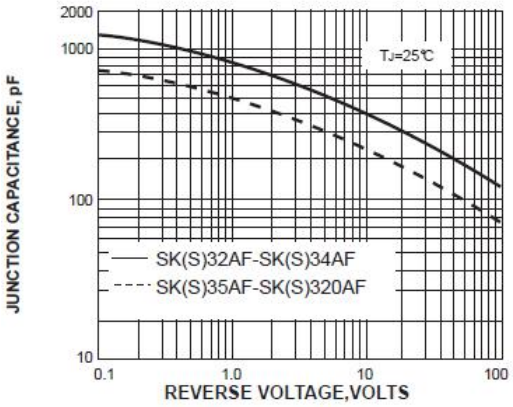
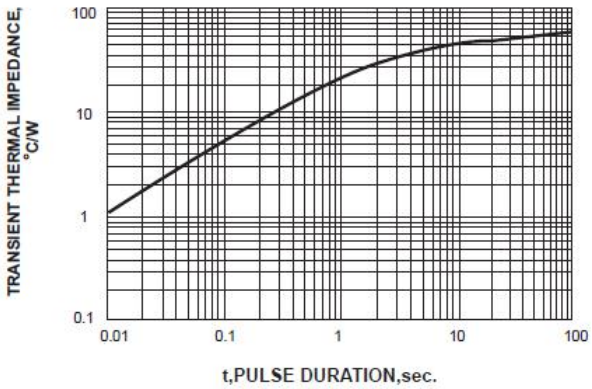



FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE






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