

II. Schottky Rectifier

3.0A Surface Mount Schottky Rectifier S32AF~S320AF

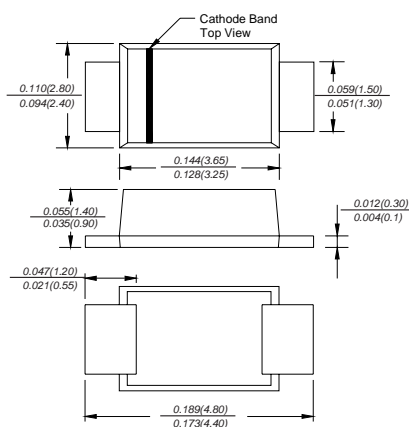
(Package: SMAF)

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 /10 seconds at terminals

MECHANICAL DATA

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



Case: SMAF
Dimensions in inches and (millimetres)

Ratings & 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%.

| Characteristics | Symbol | S32AF | S33AF | S34AF | S35AF | S36AF | S38AF | S310AF | S315AF | S320AF | 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 | I_o | 3.0 | | | | | | | | | Amps | |
| Non-repetitive peak forward surge current 8.3ms single half sine-wave | I_{FSM} | 100.0 | | | | | | | | | Amps | |
| Maximum forward voltage at 3.0A | V_F | 0.55 | | | 0.70 | | 0.85 | | 0.95 | | Volts | |
| Maximum reverse current $T_a = 25$ at V_{DC} $T_a = 100$ | I_R | 0.5 | | | | | 20.0 | | | | | mA |
| Typical thermal resistance (Note 1) | Rth-JA Rth-JL | 55.0 | | | | | 17.0 | | | | | /w |
| Typical junction capacitance $V_R = 4.0V, F = 1MHz$ | C_j | 160.0 | | | | | | | | | PF | |
| Operating junction temperature range | T_j | -55 to +125 | | | | | -55 to +150 | | | | | |
| Storage temperature range | T_{stg} | -55 to +150 | | | | | | | | | | |

Notes:

1. Thermal resistance from junction to ambient, PCB mounted.

Ratings and Characteristic Curves of S32AF~S320AF

