



SS32 THRU SS3D

Surface Mount Schottky Barrier Rectifier

Features

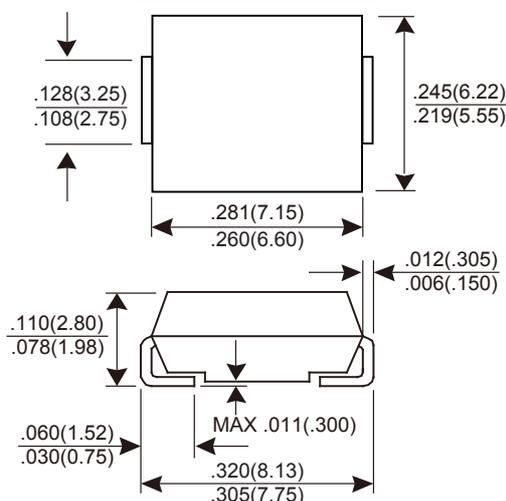
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Guardring for overvoltage protection
- ★ Low power losses, high efficiency
- ★ Low forward voltage drop
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic, SMC/DO-214AB
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

Voltage Range 20 to 200V
Current 3.0 Ampere

SMC/DO-214AB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| PARAMETER | SYMBOL | SS32 | SS33 | SS34 | SS35 | SS36 | SS38 | SS3B | SS3C | SS3D | UNIT | |
|--|-----------------|-------------|------|------|------|-------------|------|------|------|------|--------------|----|
| Maximum 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 | |
| Maximum DC blocking voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V | |
| Maximum average forward rectified current | $I_{F(AV)}$ | 3.0 | | | | | | | | | A | |
| Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load | I_{FSM} | 100 | | | | | | | | | A | |
| Maximum instantaneous forward voltage @ $I_F=3.0A$ | V_F | 0.55 | | | 0.75 | | 0.85 | | 0.95 | | V | |
| Maximum DC reverse current at rated DC blocking voltage @ $T_A=25^\circ C$ / @ $T_A=100^\circ C$ | I_R | 0.5 | | | | | 10 | | | | | mA |
| Typical thermal resistance (Note 1) | $R_{\theta JA}$ | 55 | | | | | | | | | $^\circ C/W$ | |
| | $R_{\theta JL}$ | 17 | | | | | | | | | $^\circ C/W$ | |
| Operating junction temperature range | T_J | -55 to +125 | | | | -55 to +150 | | | | | $^\circ C$ | |
| Storage temperature range | T_{STG} | -55 to +150 | | | | | | | | | $^\circ C$ | |

NOTE : (1) PCB mounted with 0.55" x 0.55" (14 mm x 14 mm) copper pad areas

RATINGS AND CHARACTERISTICS CURVES SS32 THRU SS3D

Fig.1 - Forward Current Derating Curve

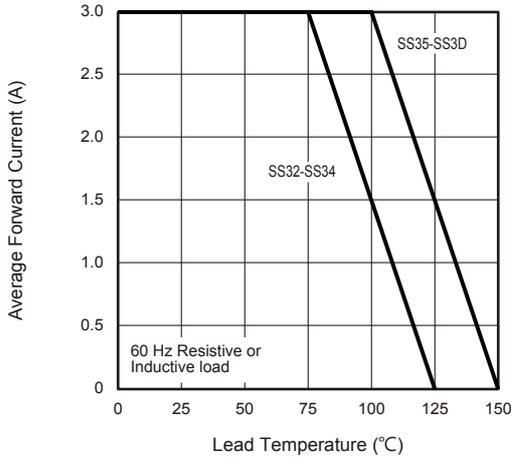


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

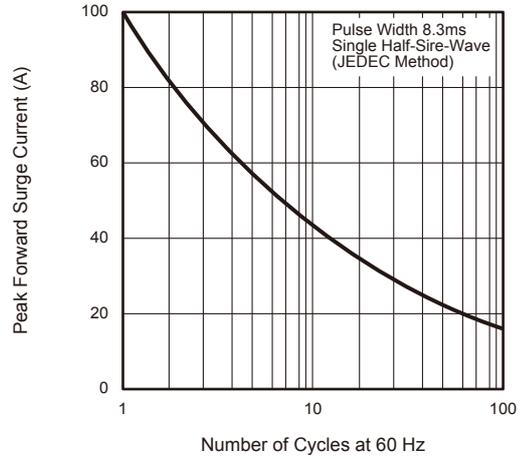


Fig.3 - Typical Instantaneous Forward Characteristics

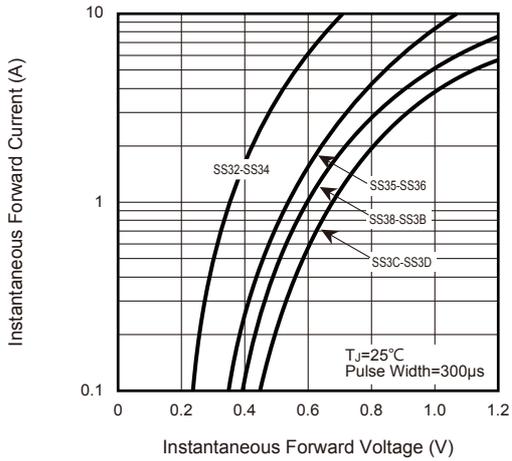


Fig.4 - Typical Reverse Leakage Characteristics

