



SS32 THRU SS320

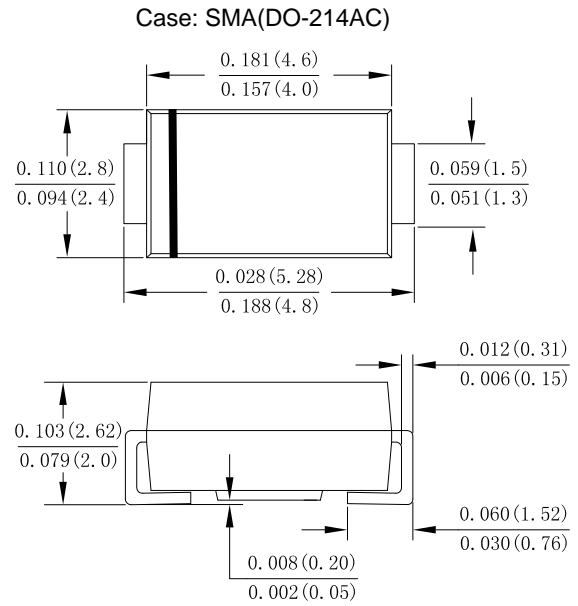
3.0 AMP Surface Mount Schottky Barrier Rectifier

Features

- Schottky Barrier Chip
- Low Power Loss, High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 80A Peak
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Making: Type Number



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%

| Type Number | SYMBOL | SS 32 | SS 33 | SS 34 | SS 345 | SS 35 | SS 36 | SS 38 | SS 310 | SS 315 | SS 320 | Unit | |
|--|-----------------|-------------|-------|-------|--------|-------|-------|-------|--------|--------|--------|------------------|----|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V | |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 31 | 35 | 42 | 56 | 70 | 105 | 140 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 45 | 50 | 60 | 80 | 100 | 150 | 200 | V | |
| Average Rectified Output Current @ $T_L = 100^\circ\text{C}$ | $I_{F(AV)}$ | 3.0 | | | | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 80 | | | | | | | | | | A | |
| Rating for fusing ($t < 8.3\text{ms}$) | I^2t | 26.56 | | | | | | | | | | A ² s | |
| Forward Voltage @ $I_F = 3.0\text{A}$ (Note 1) | V_{FM} | 0.55 | | | 0.7 | | 0.85 | | 0.92 | | | V | |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ | I_R | 0.1 | | | | | 0.05 | | | | | | mA |
| At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$ | | 10 | | | | | 5 | | | | | | |
| Typical Junction Capacitance (Note 1) | C_J | 110 | | | | | 70 | | | | | | pF |
| Typical Thermal Resistance | $R_{\theta JA}$ | 110 | | | | | | | | | | °C/W | |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | | | °C | |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | | | °C | |

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



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Fig. 1 Forward Current Derating Curve

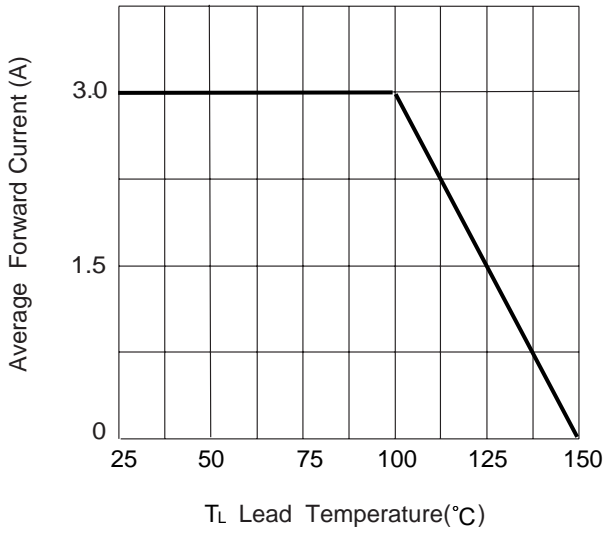


Fig. 2 Typ. Forward Characteristics

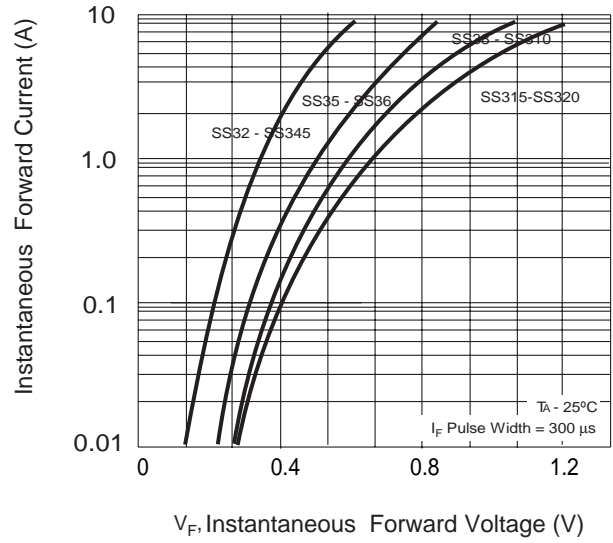


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

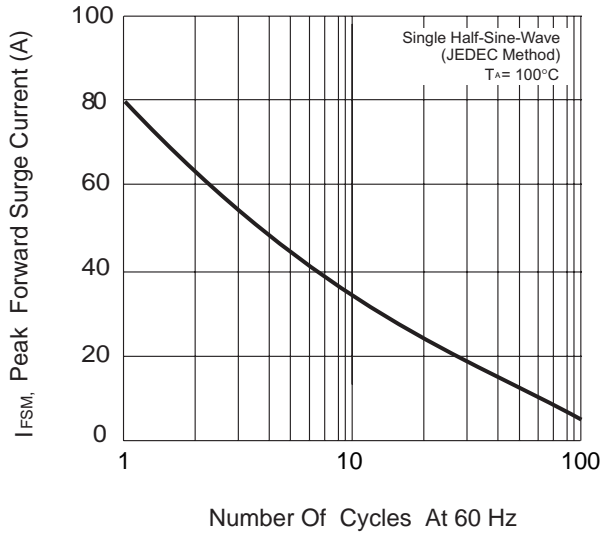


Fig.4 Typical Reverse Characteristics (per element)

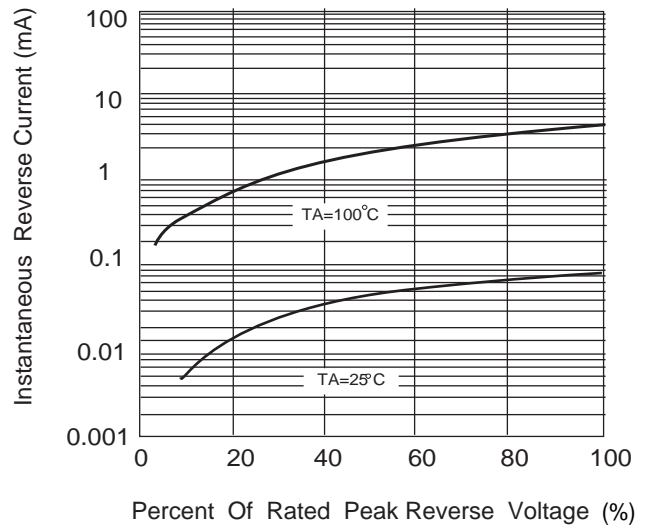
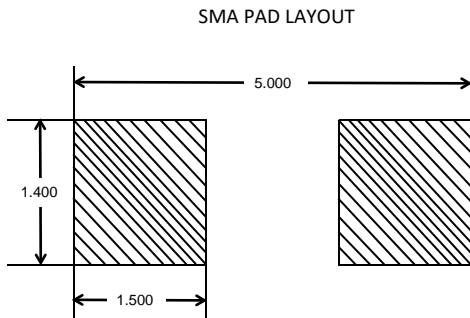


Fig.5 Mounting PAD Layout





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