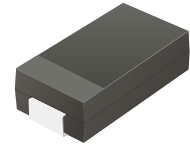


S2A-HF Thru. S2M-HF

Reverse Voltage: 50 to 1000 Volts
 Forward Current: 2.0 Amp
 RoHS Device
 Halogen Free



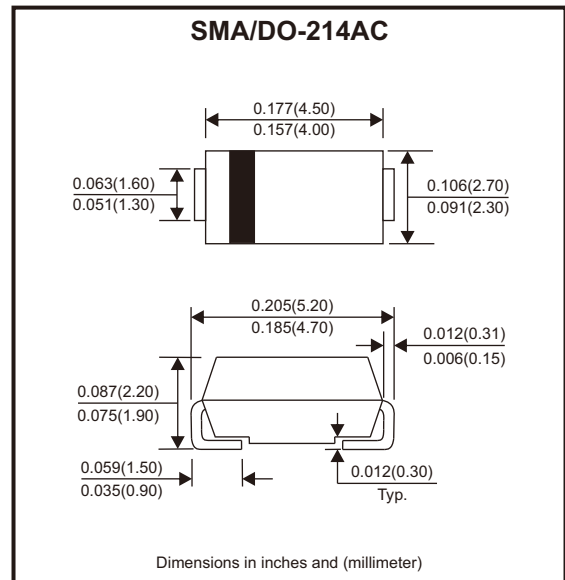
Features

- For surface mounted applications.
- Low profile package.
- Glass passivated chip junction.
- Easy to pick and place.

Mechanical data

- Case: SMA
- Terminals: Solderable per MIL-STD-750, method 2026.

Circuit Diagram



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, derate by 20%

| Parameter | Symbols | S2A-HF | S2B-HF | S2D-HF | S2G-HF | S2J-HF | S2K-HF | S2M-HF | Units |
|--|-----------------|------------|--------|--------|--------|--------|--------|--------|---------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 2 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 50 | | | | | | | A |
| Max instantaneous forward voltage at 2A | V_F | 1.1 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | 5 100 | | | | | | | μA |
| Typical junction capacitance (Note 1) | C_j | 25 | | | | | | | pF |
| Typical thermal resistance (Note 2) | $R_{\theta JA}$ | 65 | | | | | | | °C/W |
| Operating and storage temperature range | T_j, T_{stg} | -55 ~ +150 | | | | | | | °C |

Notes: 1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
 2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

Rating and Characteristic Curves (S2A-HF Thru. S2M-HF)

Fig.1 - Forward Current Derating Curve

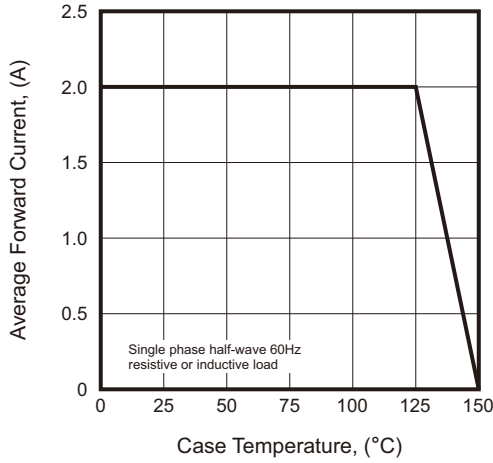


Fig.2 - Typical Reverse Characteristics

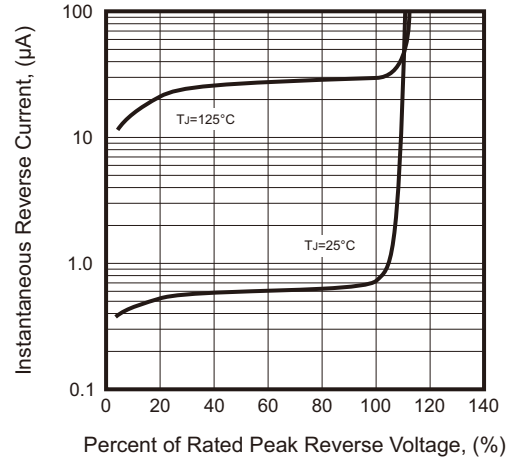


Fig.3 - Typical Forward Characteristic

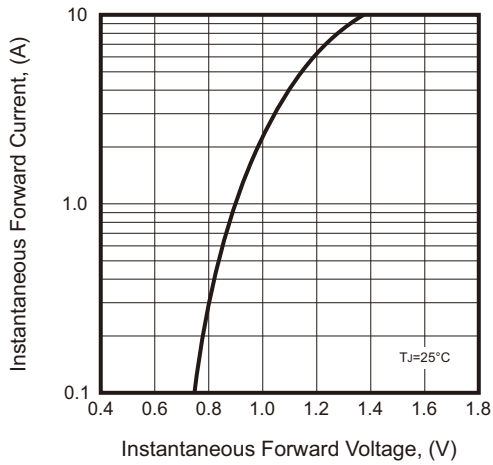


Fig.4 - Typical Junction Capacitance

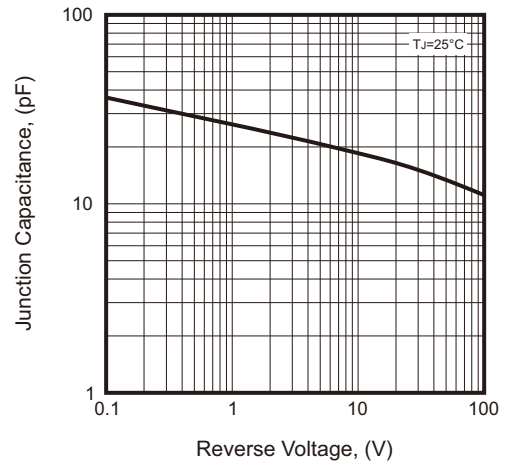
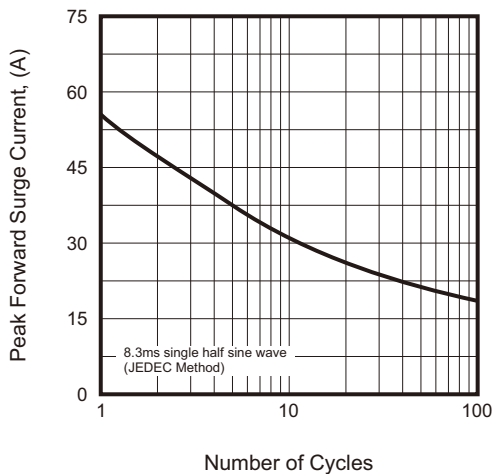
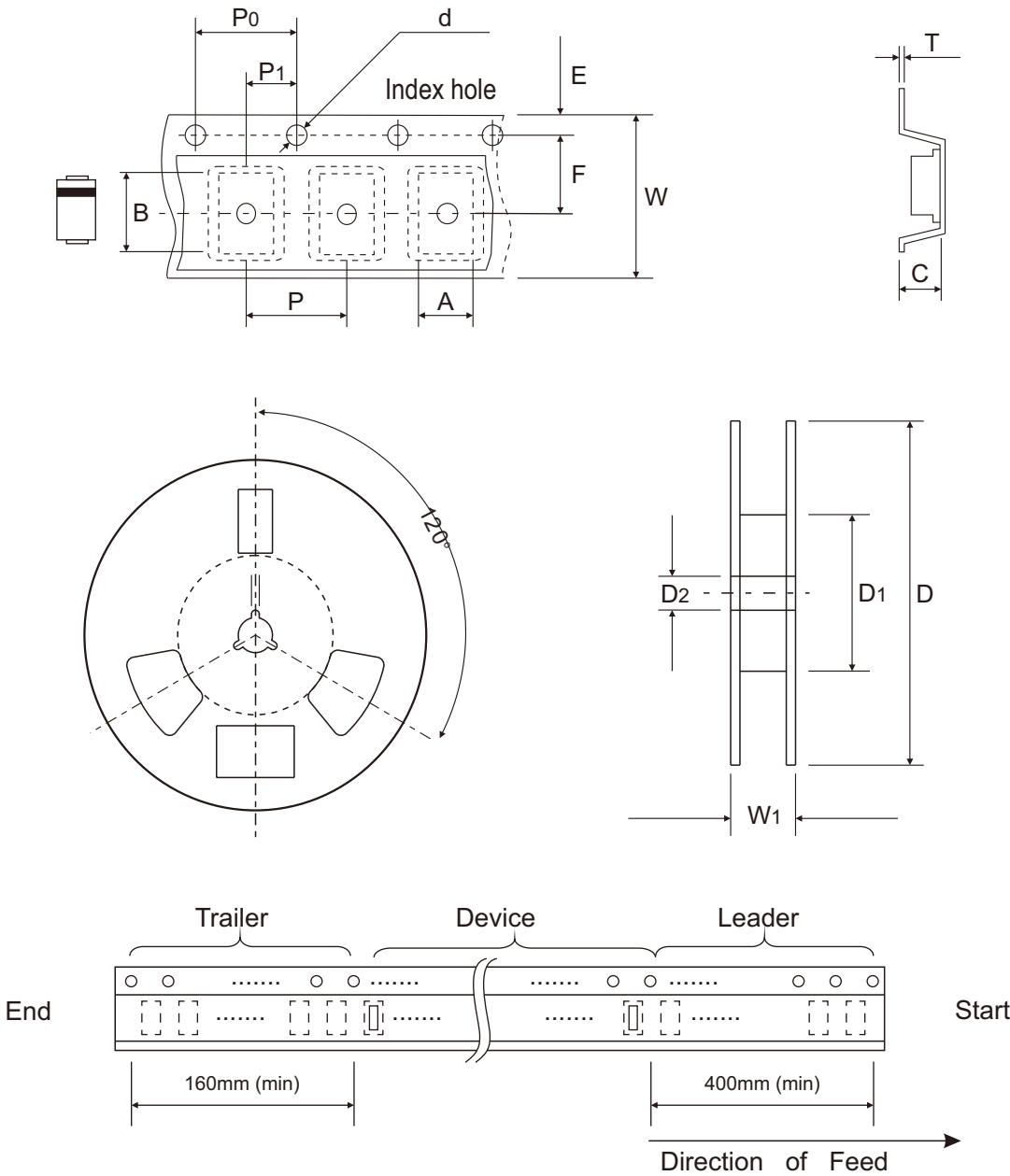


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current



Reel Taping Specification



| DO-214AC (SMA) | SYMBOL | A | B | C | d | D | D1 | D2 |
|----------------|--------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|
| | (mm) | 2.70 ± 0.10 | 5.33 ± 0.10 | 2.35 ± 0.10 | 1.55 ± 0.05 | 330 ± 2.00 | 75.00 ± 1.00 | 13.00 ± 0.20 |
| | (inch) | 0.106 ± 0.004 | 0.210 ± 0.004 | 0.093 ± 0.004 | 0.061 ± 0.002 | 12.992 ± 0.079 | 2.953 ± 0.039 | 0.512 ± 0.008 |

| DO-214AC (SMA) | SYMBOL | E | F | P | P0 | P1 | T | W | W1 |
|----------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 0.20 ± 0.03 | 12.00 ± 0.30 | 14.70 + 2.00 - 1.00 |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.002 | 0.157 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.008 ± 0.001 | 0.472 ± 0.012 | 0.579 + 0.079 - 0.039 |

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REV:A