

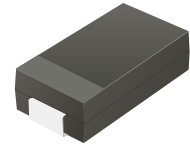
RS2A-HF Thru. RS2M-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 2 Amp

RoHS Device

Halogen Free



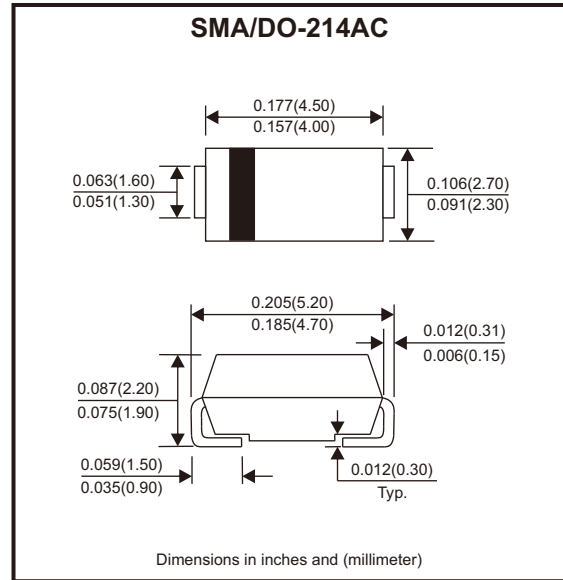
Features

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

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 | RS2A -HF | RS2B -HF | RS2D -HF | RS2G -HF | RS2J -HF | RS2K -HF | RS2M -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 at T _c = 125°C | I _{F(AV)} | 2 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 50 | | | | | | | A |
| Max. forward voltage at 2A | V _F | 1.3 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage T _a = 25°C T _a = 125°C | I _R | 5 100 | | | | | | | μA |
| Typical junction capacitance at V _R = 4V, f = 1MHz | C _j | 22 | | | | | | | pF |
| Maximum reverse recovery time (Note 1) | t _{rr} | 150 | | | | 250 | 500 | | ns |
| Typical thermal resistance (Note 2) | R _{θJA} R _{θJC} | 65 20 | | | | | | | °C/W |
| Operating and storage temperature range | T _j , T _{stg} | -55 ~ +150 | | | | | | | °C |

Notes: 1. Measured with I_F = 0.5A, I_R = 1A, I_{rr} = 0.25A.
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 (RS2A-HF Thru. RS2M-HF)

Fig.1 - Forward Current Derating Curve

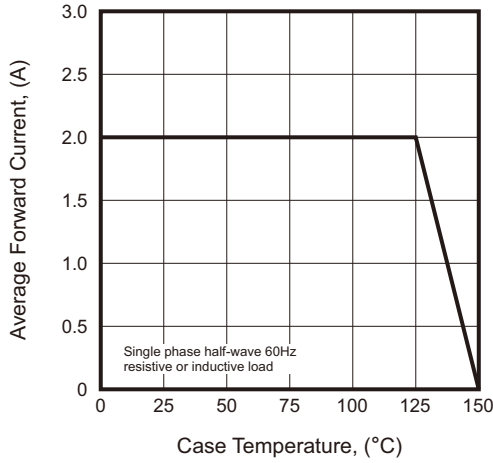


Fig.2 - Typical Reverse Characteristics

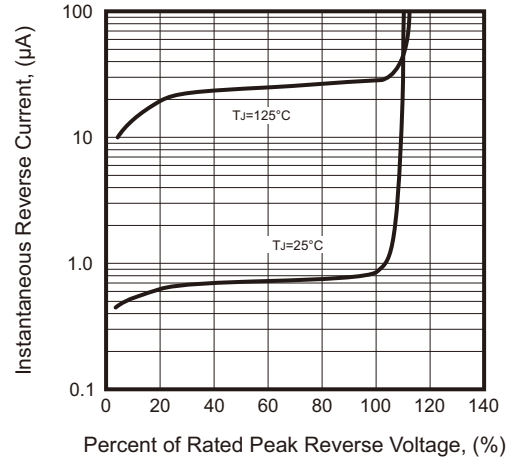


Fig.3 - Typical Instantaneous Forward Characteristic

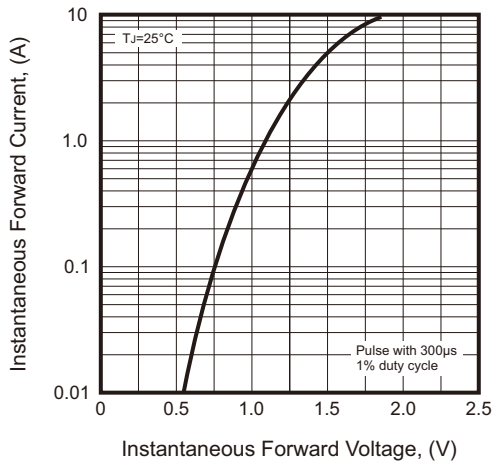


Fig.4 - Typical Junction Capacitance

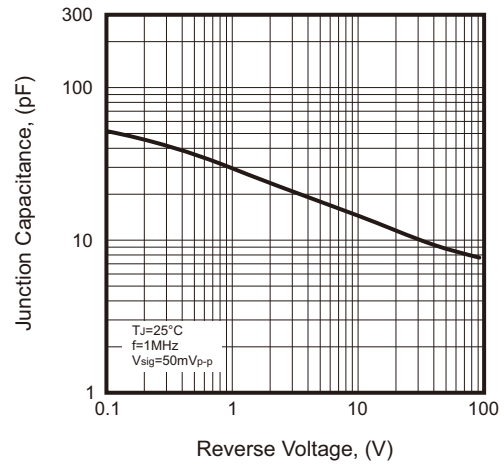
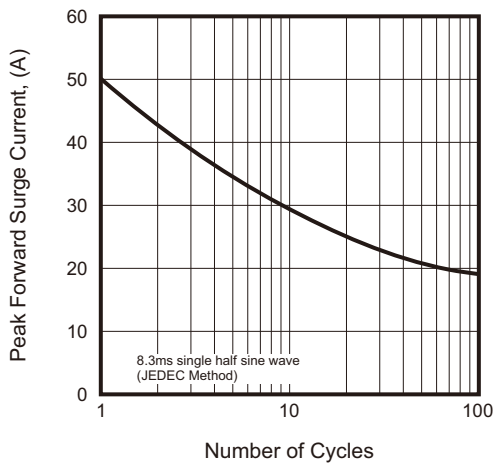


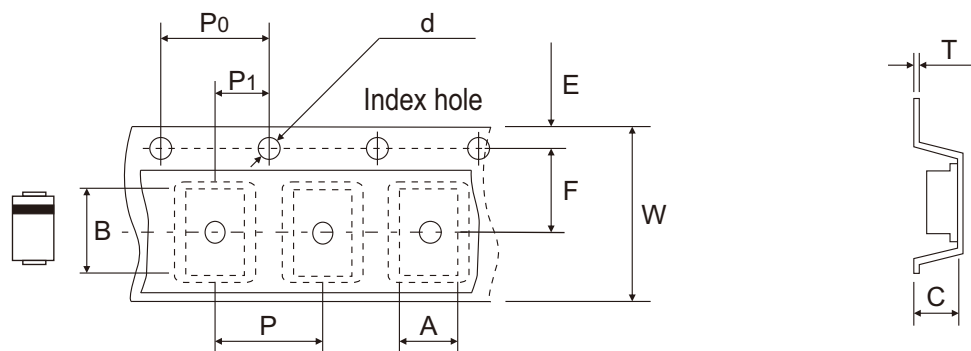
Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current



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REV:A

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 |

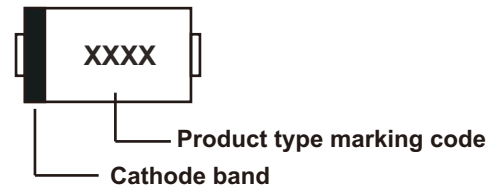
| DO-214AC (SMA) | SYMBOL | E | F | P | P0 | P1 | T | W | W1 |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 4.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 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

Marking Code

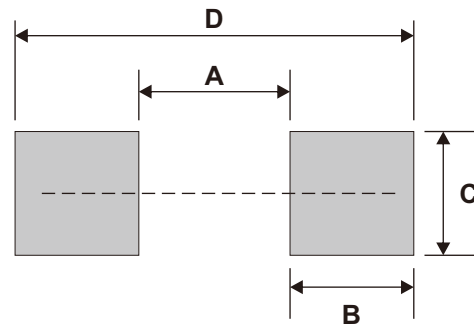
| Part Number | Marking Code |
|-------------|--------------|
| RS2A-HF | RS2A |
| RS2B-HF | RS2B |
| RS2D-HF | RS2D |
| RS2G-HF | RS2G |
| RS2J-HF | RS2J |
| RS2K-HF | RS2K |
| RS2M-HF | RS2M |



xxxx = Product type marking code

Suggested PAD Layout

| SIZE | DO-214AC (SMA) | |
|------|----------------|--------|
| | (mm) | (inch) |
| A | 2.40 | 0.094 |
| B | 1.80 | 0.071 |
| C | 1.80 | 0.071 |
| D | 6.00 | 0.236 |



Note: 1. The pad layout is for reference purpose only.

Standard Packaging

| Case Type | REEL PACK | |
|-------------------|-----------------|---------------------|
| | REEL (pcs) | Reel Size (inch) |
| DO-214AC (SMA) | 5,000 | 13 |