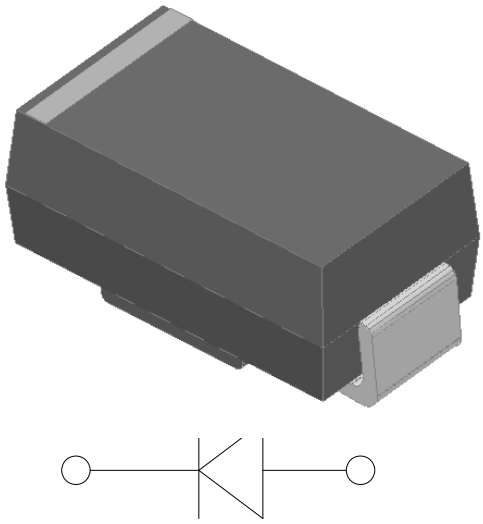
# Surface Mount Schottky Rectifier



## Features

- Low profile package
- Ideal for automated placement
- Low power losses, high efficiency
- High forward surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

## Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, and polarity protection applications.

## Mechanical Data

- **Package**: DO-214AC (SMA)
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

## ■ Maximum Ratings (Tj=25℃ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | SS34AT |
|---|---|---|---|
| Device marking code | | | SS34AT |
| Repetitive peak reverse voltage | $V_{RRM}$ | V | 40 |
| Maximum RMS Voltage | VRMS | V | 28 |
| Average rectified output current @60Hz sine wave, resistance load,TL (FIG.1) | $I_O$ | A | 3.0 |
| Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, Tj=25℃ | $I_{FSM}$ | A | 80 |
| Storage temperature | $T_{stg}$ | ℃ | -55 ~+150 |
| Junction temperature | Tj | ℃ | -55~+150 |
| Typical Junction capacitance @4V,1MHz | Cj | pF | 168 |

## ■ Electrical Characteristics (Tj=25℃ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | SS34AT |
|---|---|---|---|---|
| Maximum instantaneous forward voltage drop per diode | $V_F$ | V | $I_{FM}$=3.0A | 0.55 |
| Maximum DC reverse current at rated DC blocking voltage per diode@ $V_{RM}$=$V_{RRM}$ | $I_{RRM}$ | mA | Tj=25℃ | 0.50 |
| | | | Tj=125℃ | 10 |

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

## ■ Thermal Characteristics (Tj=25℃ Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | SS34AT |
|---|---|---|---|
| Thermal resistance | $R_{\theta J-A}$ | ℃/W | 55 |
| | $R_{\theta J-L}$ | | 17 |

## ■ Characteristics (Typical)

FIG1:Io-TL Curve

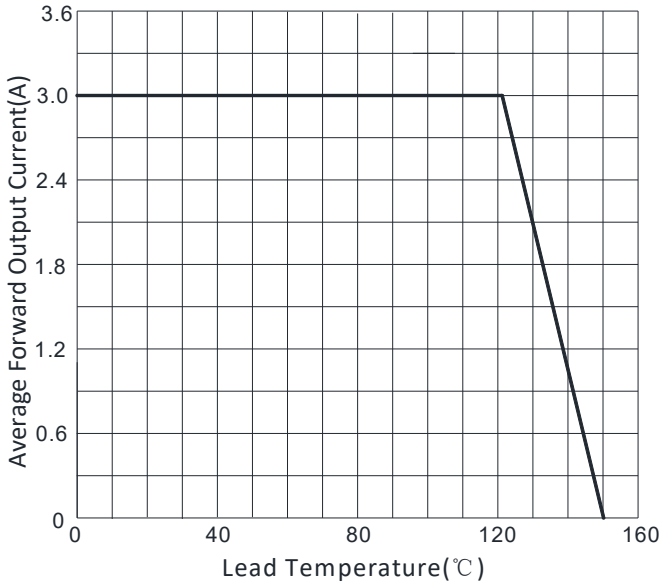



FIG2:Surge Forward Current Capadility

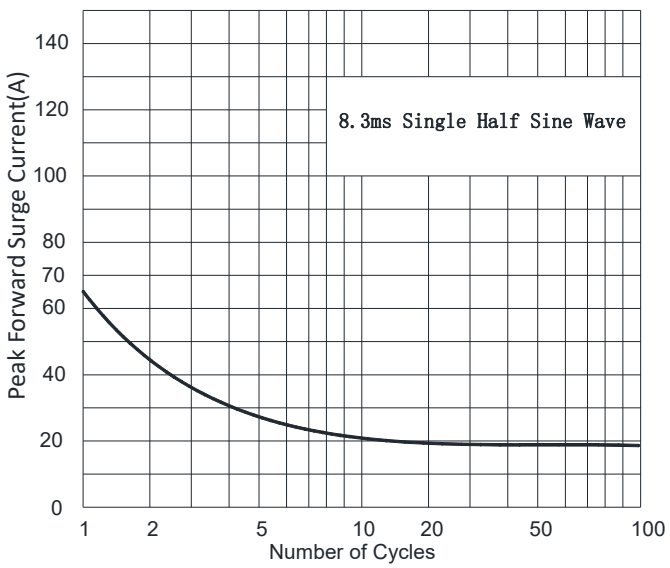



FIG3: Forward Voltage

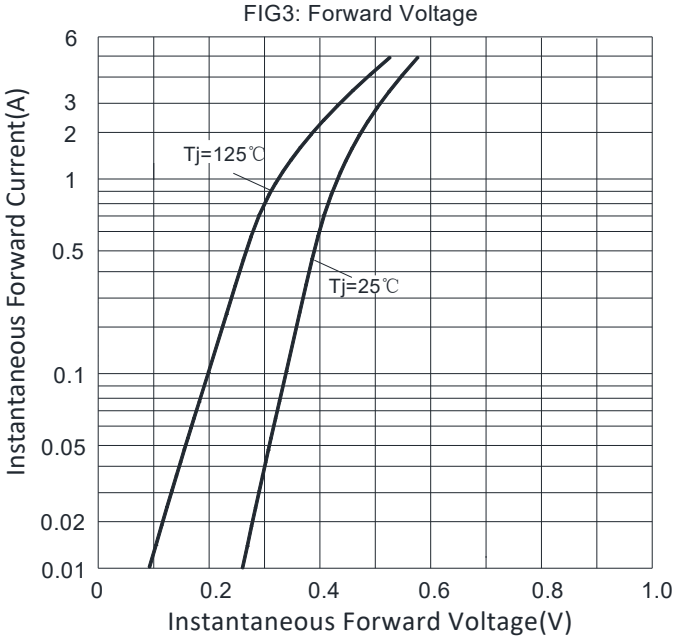
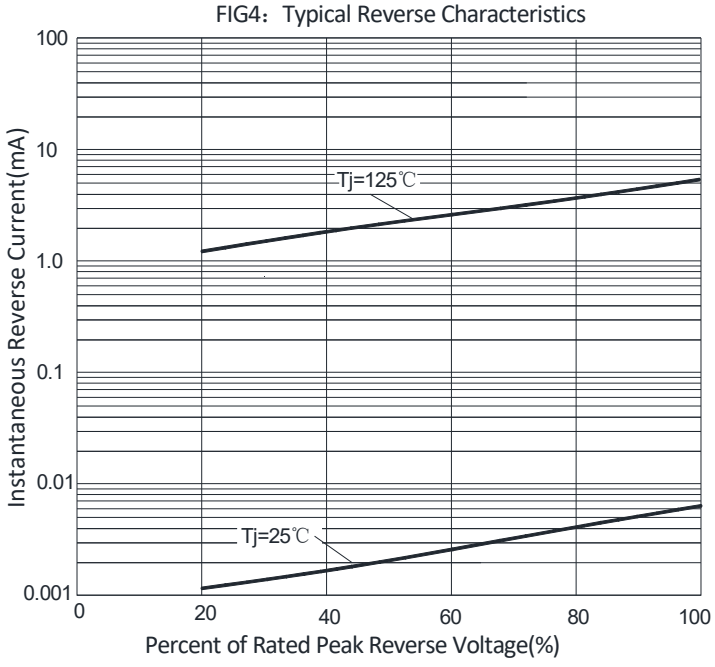


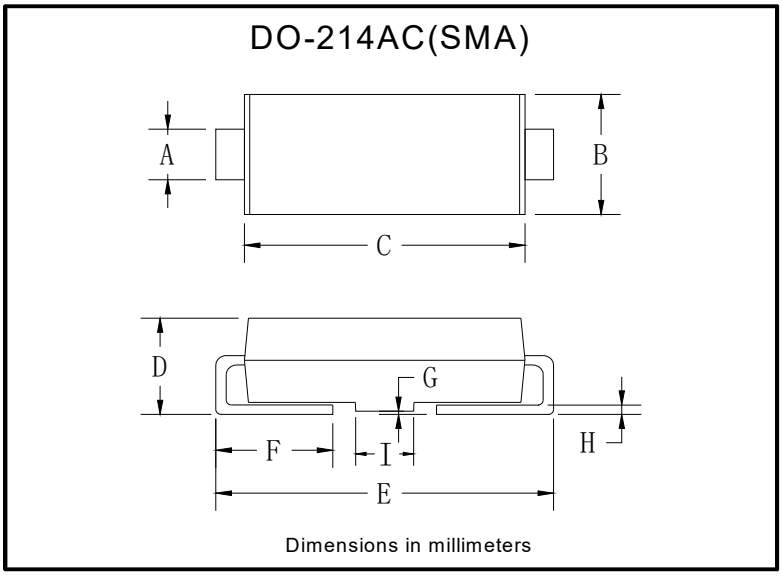

FIG4：Typical Reverse Characteristics



## ■ Ordering Information (Example)

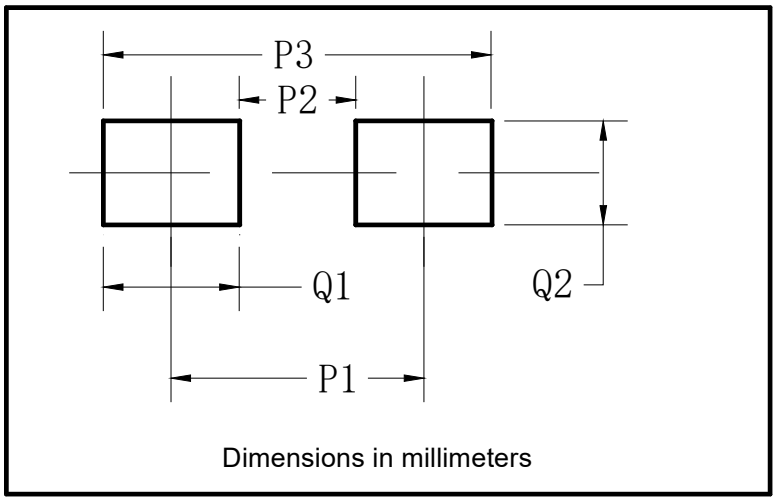
| PREFERED P/N | PACKAGE CODE | UNIT WEIGHT(g) | MINIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|---|---|---|---|---|---|---|
| SS34AT | F1 | Approximate 0.059 | 5000 | / | 80000 | 13” reel |
| SS34AT | F2 | Approximate 0.059 | 7500 | / | 120000 | 13” reel |
| SS34AT | F3 | Approximate 0.059 | 7500 | / | 60000 | 13” reel |
| SS34AT | F4 | Approximate 0.059 | 1800 | 7200 | 57600 | 7” reel |
| SS34AT | F5 | Approximate 0.059 | 2000 | 8000 | 64000 | 7” reel |
| SS34AT | F6 | Approximate 0.059 | 5000 | / | 100000 | 13” reel |

## ■ Outline Dimensions




| DO-214AC(SMA) | | |
|---|---|---|
| Dim | Min | Max |
| A | 1.25 | 1.58 |
| B | 2.40 | 2.83 |
| C | 4.00 | 4.75 |
| D | 1.90 | 2.30 |
| E | 4.93 | 5.28 |
| F | 0.76 | 1.41 |
| G | 0.05 | 0.20 |
| H | 0.15 | 0.31 |
| I | 1.70 | 2.10 |

## ■Suggested Pad Layout




| DO-214AC(SMA) | |
|---|---|
| Dim | Millimeters |
| P1 | 4.00 |
| P2 | 1.50 |
| P3 | 6.50 |
| Q1 | 2.50 |
| Q2 | 1.70 |

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