

S-SM340A

Schottky Barrier Rectifiers

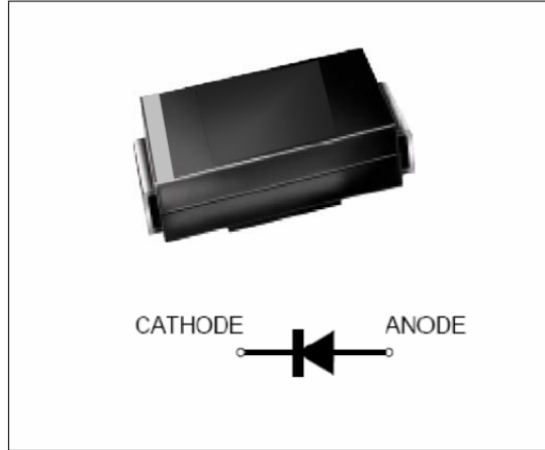
Reverse Voltage 40V Forward Current 3.0A

FEATURES

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Low power loss,high efficiency
- * For use in low voltage high frequency inverters, free wheeling,and polarity protection applications
- * Guardring for over voltage protection
- * High temperature soldering guaranteed: 260°C/10 seconds at terminals
- * S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

Mechanical Data

Case: JEDEC DO-214AC,
molded plastic over glass body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.0023 oz., 0.065 g
Handling precaution:None



We declare that the material of product compliance with ROHS requirements

1.Electrical Characteristic

Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol | symbol | S-SM340A | Unit |
|--|-----------------------------------|-------------|------|
| device marking code | | S34 | |
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Maximum RMS voltage | V_{RMS} | 28 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | V |
| Maximum average forward rectified current at TC= 75°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 |
| Typical thermal resistance (Note 1) | R θ JA | 175 | °C/W |
| | R θ JC | 50 | |
| Operating junction and storage temperature range | T _J , T _{STG} | -40 to +150 | °C |

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter Symbol | symbol | S-SM340A | Unit |
|--|--------|----------|------|
| Maximum instantaneous forward voltage at 3.0A | V_F | 0.55 | V |
| Maximum DC reverse current TA = 25°C at rated DC blocking voltage TJ = 100°C | IR | 0.5 | mA |
| | | 10.0 | |
| Typical junction capacitance at 4.0V, 1MHz | CJ | 260 | PF |

NOTES:

1. FR-4 Board ,Heat sinks with single-sided copper foil , copper foil thickness 50µm 1.77* 1.60 * 2

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2. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

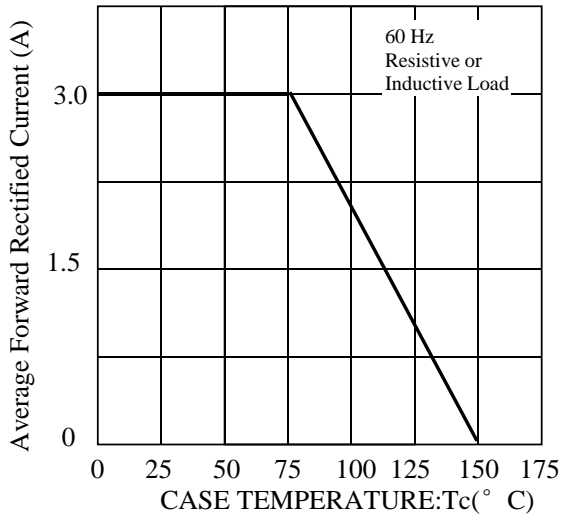


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

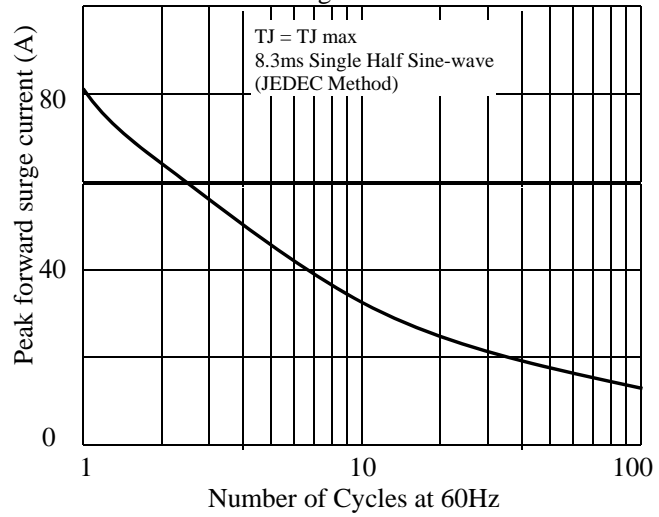


Fig. 3. - Typical Instantaneous Forward Characteristics

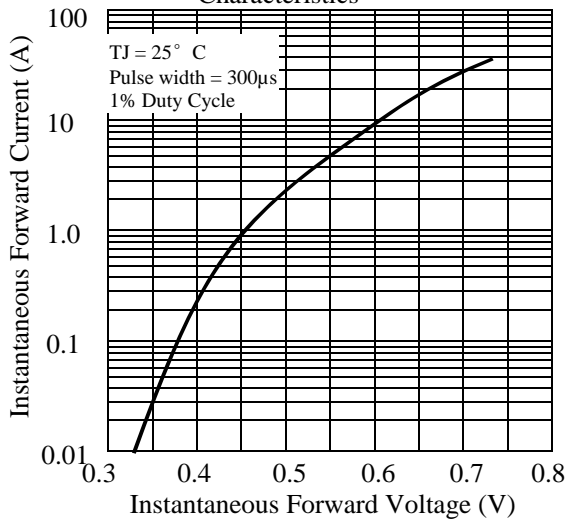


Fig 4. - Typical Reverse Characteristics

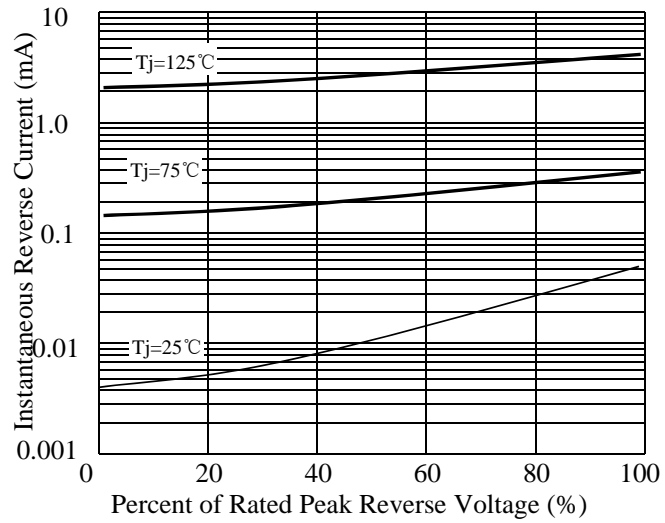


Fig 5. - typical transient thermal impedance

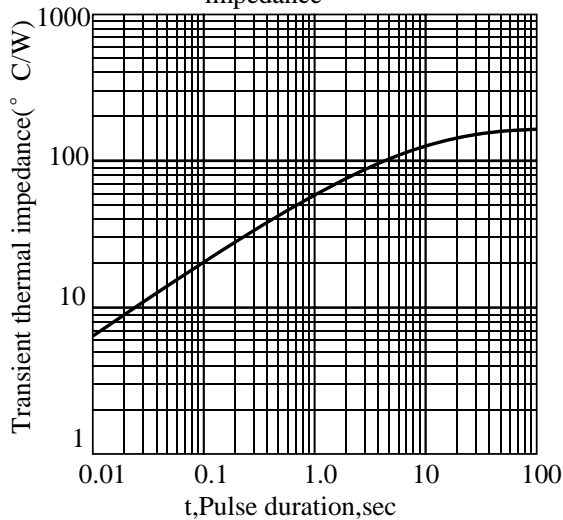
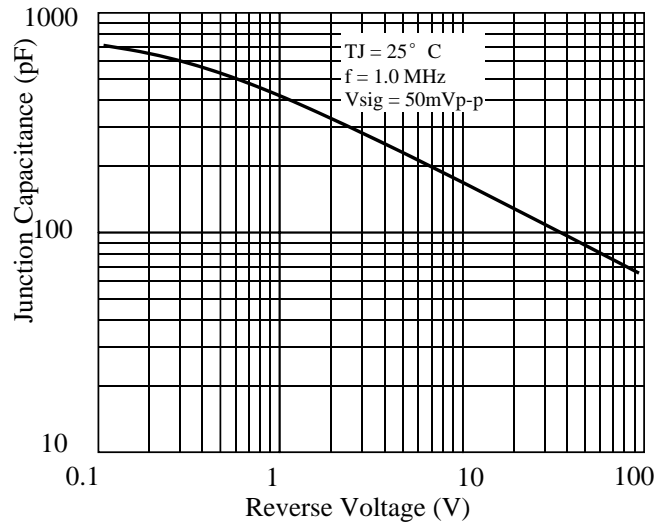
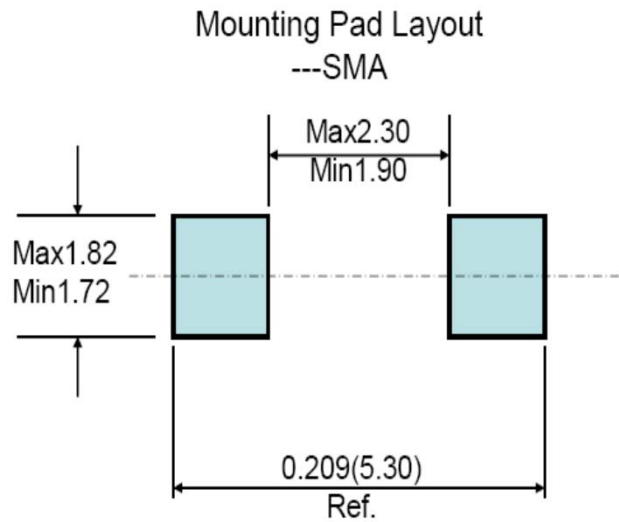
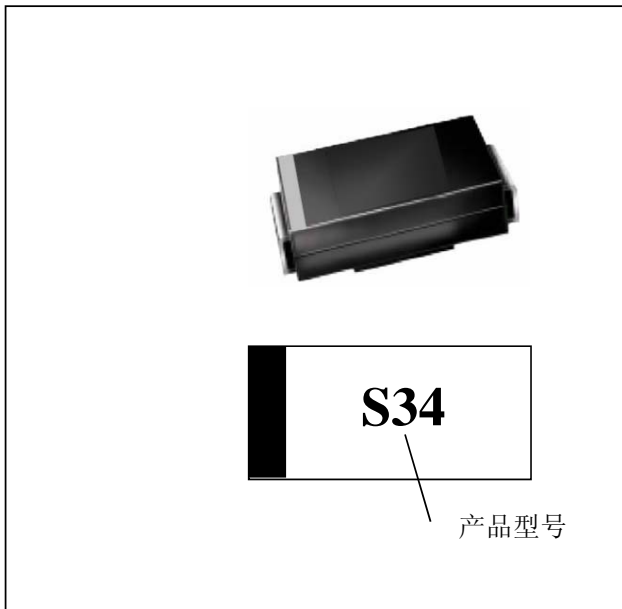
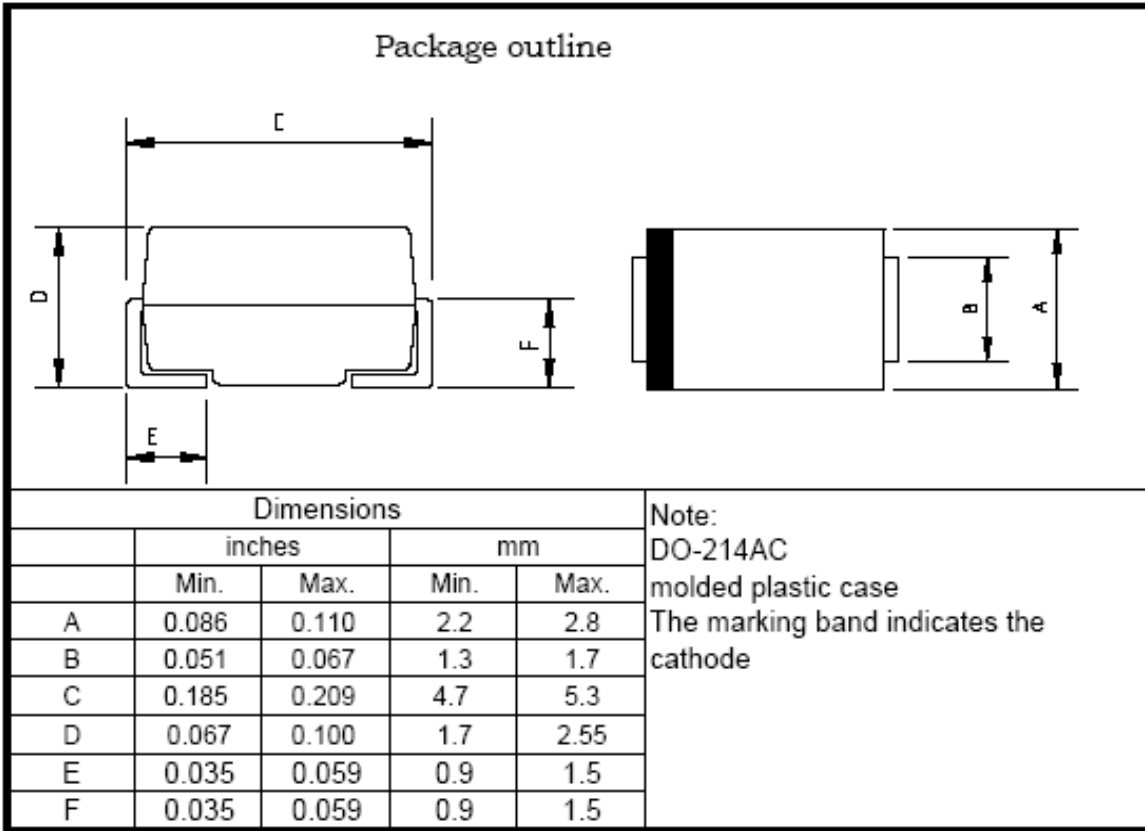


Fig 6. - Typical Junction Capacitance



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3. dimension:



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6. Update Record

| 版次 | 更新记录 | 更新作者 | 更新日期 |
|----|-----------------|------|------------|
| 1 | 第一版 | 周杰 | 2014-4-11 |
| 2 | 变更印字 | 谭志伟 | 2017-10-25 |
| B | VF 0.5V变更到0.55V | 谭志伟 | 2021-10-09 |