

SS24

2A, Schottky Barrier Diode

[Http://www.sh-willsemi.com](http://www.sh-willsemi.com)

Features

- Schottky barrier rectifier
- Guarding protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance
- Standard products are Pb-free and Halogen-free



SMA(DO-214AC)

**.SS24= Device code****Pin configuration and Marking**

MECHANICAL DATA

- Case: SMA molded plastic body
- Polarity: Color band denotes cathode end
- Mounting position: ANY

Order information

| Device | Package | Shipping |
|--------|----------------|----------------|
| SS24 | SMA (DO-214AC) | 5000/Tape&Reel |

Absolute maximum ratings

| Parameter | Symbol | Value | Unit |
|--|-------------|-----------|------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 40 | V |
| Maximum RMS voltage | V_{RWS} | 28 | V |
| Maximum DC blocking voltage | V_{DC} | 40 | V |
| Maximum average forward rectified current at T_L (Fig.2) | $I_{F(AV)}$ | 2.0 | A |
| Peak forward surge current 8.3ms single half-sine-wave | I_{FSM} | 40 | A |
| Operating temperature range | T_J | -55 ~ 125 | °C |
| Storage temperature range | T_{STG} | -55 ~ 150 | °C |

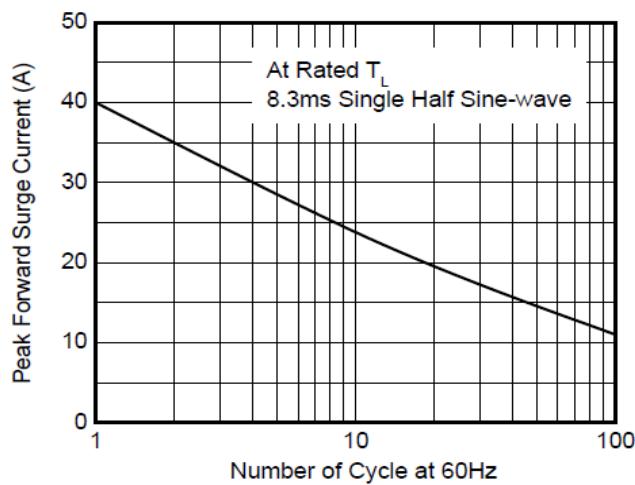
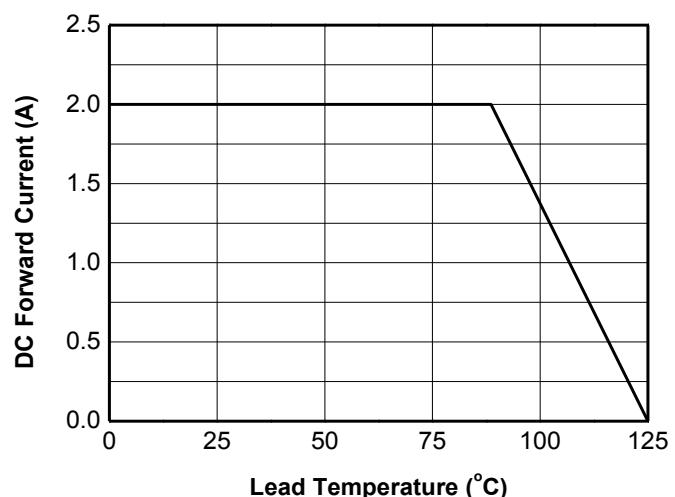
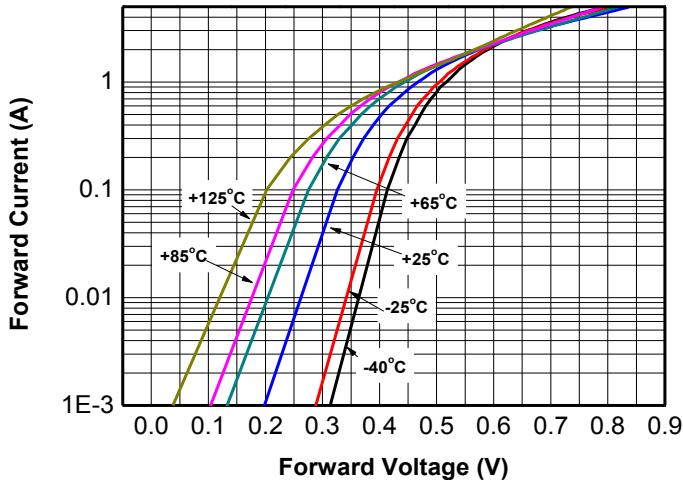
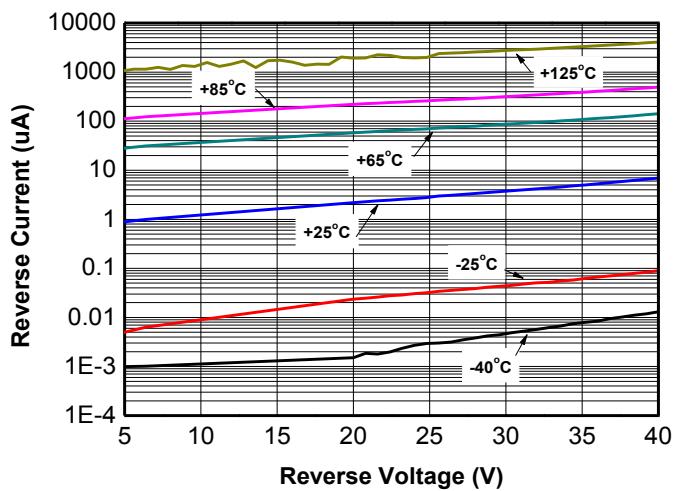
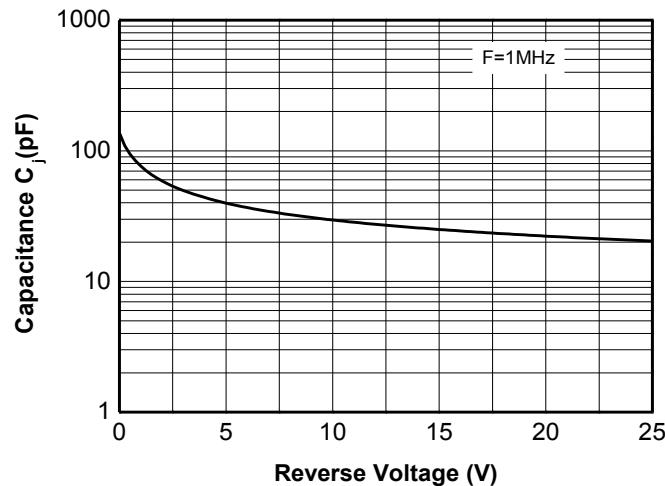
Thermal Characteristics

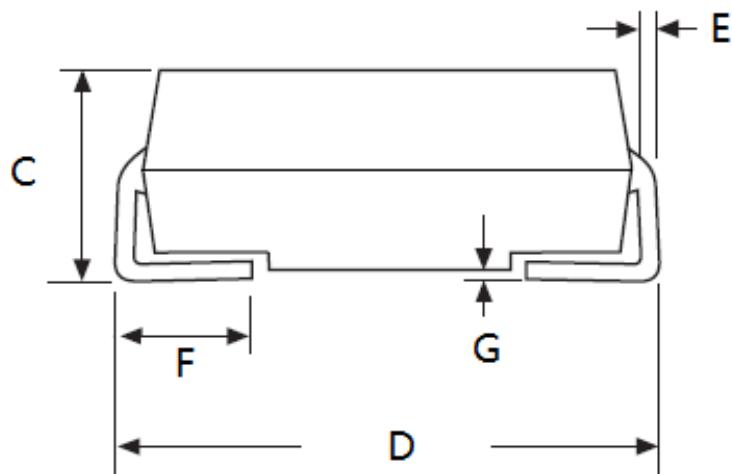
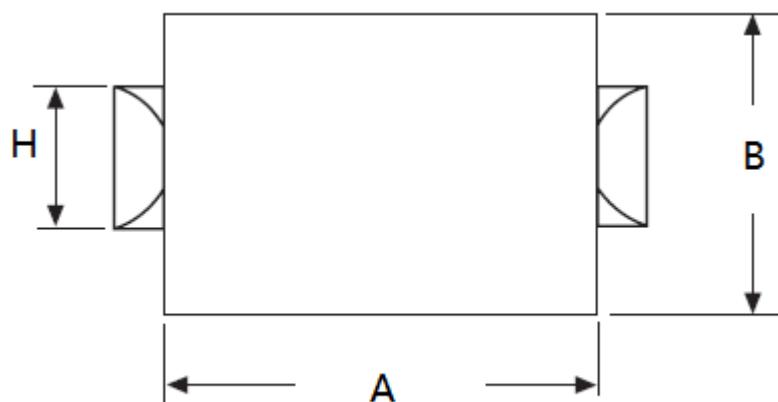
| Parameter | Symbol | Value | Unit |
|--|-----------------|-------|------|
| Maximum thermal resistance (Junction to Lead)(Fig.2) | $R_{\theta JL}$ | 28 | °C/W |

Electronics characteristics ($T_A=25^\circ C$)

| Parameter | Symbol | Value | Unit |
|--|--------|-------|------|
| Maximum instantaneous forward voltage @ $I_F=2.0A^*$ | V_F | 0.66 | V |
| Maximum reverse current @ V_{DC} ($T_J=25^\circ C$) | I_R | 0.2 | mA |
| Maximum reverse current @ V_{DC} ($T_J=100^\circ C$) | I_R | 6 | mA |

*: Pulse test, Pulse width 380us, duty cycle 1%

Typical characteristics ($T_a=25^\circ\text{C}$, unless otherwise noted)

Fig.1: Peak Forward Surge Current

Fig.2: Forward current Derating Curve

Fig.3: Typical Forward Characteristics

Fig.4: Typical Reverse Characteristics

Fig.5: Junction capacitance vs. Reverse voltage

Package outline dimensions
SMA (DO-214AC)


| Symbol | Dimensions in millimeter | |
|--------|--------------------------|-------|
| | Min. | Max. |
| A | 3.90 | 4.40 |
| B | 2.45 | 2.75 |
| C | 1.90 | 2.40 |
| D | 4.85 | 5.25 |
| E | 0.152 | 0.305 |
| F | 0.76 | 1.52 |
| G | 0.203 Max. | |
| H | 1.45 | 1.95 |