



Standard Surface Mounted Rectifiers

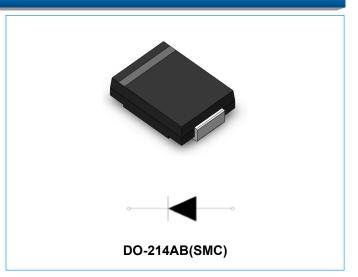
GS5AC~GS5MC 5.0A 50 to 1000V DO-214AB(SMC)

Features

- ♦ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- ♦ Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- ♦ High temperature soldering guaranteed 250°C/10 seconds at terminals

Mechanical Data

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any



Maximum Ratings and Electrical Characteristics ($T_A = 25^{\circ}$ unless otherwise noted)

Ratings at 25 $^{\circ}$ C ambient temperature unless otherwise specified. Single phase half wave 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Items | Symbol | GS5AC | GS5BC | GS5DC | GS5GC | GS5JC | GS5KC | GS5MC | Unit |
|--|----------------------------------|-------------|-------|-------|-------|-------|---------------|-------|------|
| 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 _(AV) | 5.0 | | | | А | | | |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I _{FSM} | 150 | | | | А | | | |
| Maximum instantaneous forward voltage at 5.0A | V _F | 1.1 | | | | V | | | |
| | - I _R | 5 500 | | | | μA | | | |
| Typical junction capacitance (Note 1) | CJ | 50 | | | pF | | | | |
| Typical thermal resistance | R _{qJA} | 47 | | | °C/W | | | | |
| Operating junction and storage temperature range | T _J ,T _{STG} | -55 to +150 | | | | | ${\mathbb C}$ | | |

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.





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Ratings And Characteristic Curves

Fig1. Derating Curve Output Rectified Current

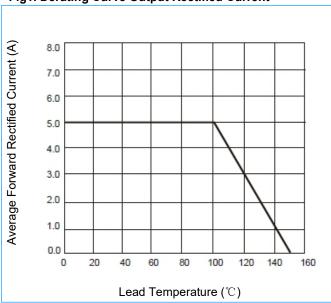


Fig2. Maximum Non-Repetitive Peak Forward Surge Current Perleg

210

180

150

90

120

90

1660Hz

Number of Cycles

Fig3. Typical Forward Voltage Characteristics

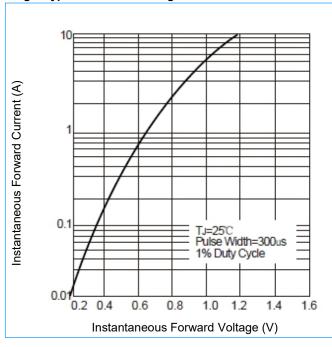
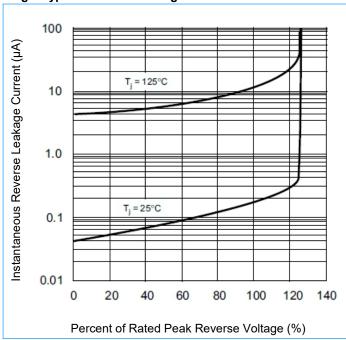


Fig4. Typical Reverse Leakage Characteristics



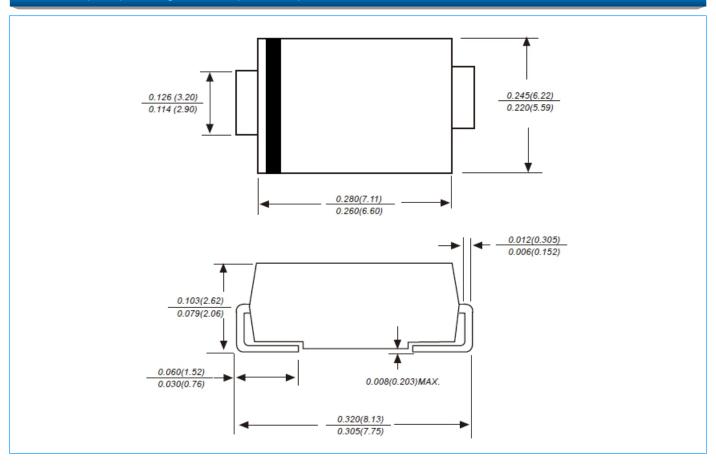




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DO-214AB(SMC) Package Outline (Unit: mm)



Packaging Information

| Part Number | Component Package | Quantity | | |
|-------------|-------------------|---------------|--|--|
| GS5AC~GS5MC | DO-214AB(SMC) | 3000 PCS/REEL | | |

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