

### ■ Features

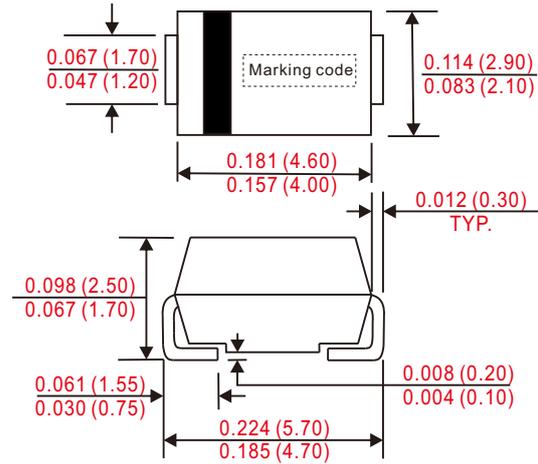
- Low profile surface mounted application in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.
- Suffix "G" indicates Halogen-free part, ex. SLL22AG.
- Lead-free parts meet environmental standards of MIL-STD-19500 /228

### ■ Mechanical data

- Epoxy: UL94-V0 rated flame retardant
- Case : Molded plastic, DO-214AC / SMA
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Weight : 0.002 ounce, 0.055 gram

### ■ Outline

SMA(DO-214AC)



Dimensions in inches and (millimeters)

### ■ Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Parameter                  | Conditions   | Symbol          | MIN. | TYP. | MAX. | UNIT |
|----------------------------|--|-----------------|------|------|------|------|
| Forward rectified current  |  | $I_O$           |      |      | 2.0  | A    |
| Forward surge current      | 8.3ms single half sine-wave superimposed on rate load (JEDEC method) | $I_{FSM}$       |      |      | 70   | A    |
| Reverse current            | $V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$                             | $I_R$           |      |      | 2    | mA   |
|                            | $V_R = V_{RRM}$ $T_A = 100^\circ\text{C}$                            |                 |      |      | 20   |      |
| Diode junction capacitance | f=1MHz and applied 4V DC reverse voltage                             | $C_J$           |      | 160  |      | pF   |
| Thermal resistance         | Junction to ambient  | $R_{\theta JA}$ |      | 70   |      | °C/W |
| Storage temperature        |  | $T_{STG}$       | -55  |      | +150 | °C   |

| Symbol | Marking code | Max. repetitive peak reverse voltage $V_{RRM}$ (V) | Max. RMS voltage $V_{RMS}$ (V) | Max. DC blocking voltage $V_R$ (V) | Max. forward voltage @2A, $T_A = 25^\circ\text{C}$ $V_F$ (V) | Operating temperature $T_J$ (°C) |
|--------|--------------|--|--------------------------------|------------------------------------|--|----------------------------------|
| SLL22A | SLL22        | 20   | 14                             | 20                                 | 0.33   | -55 ~ +100                       |
| SLL24A | SLL24        | 40   | 28                             | 40                                 | 0.35   |                                  |

■ Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

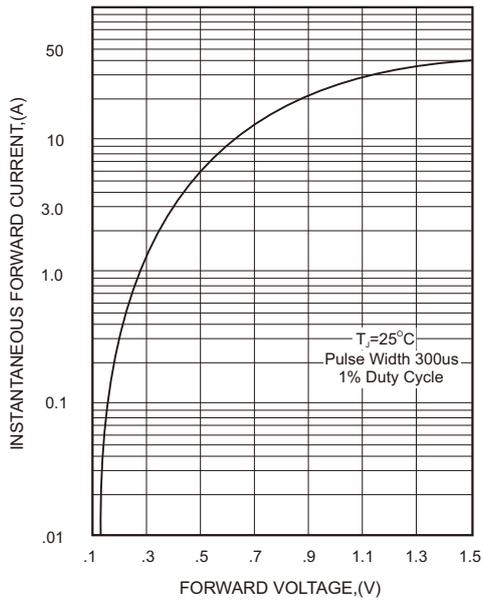


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

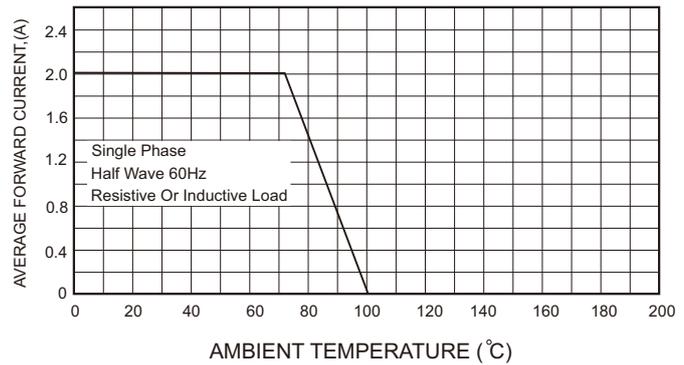


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

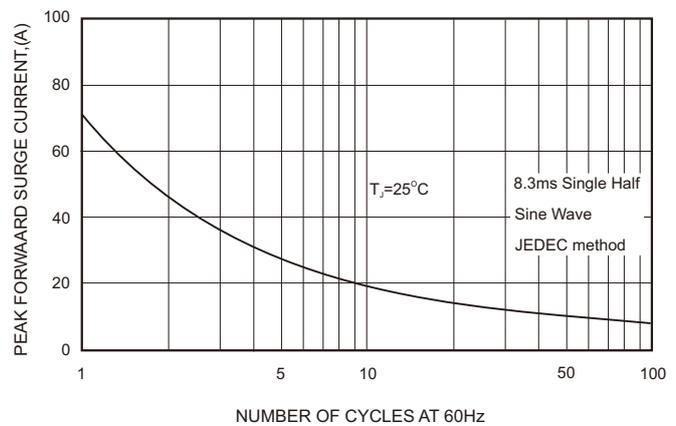


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

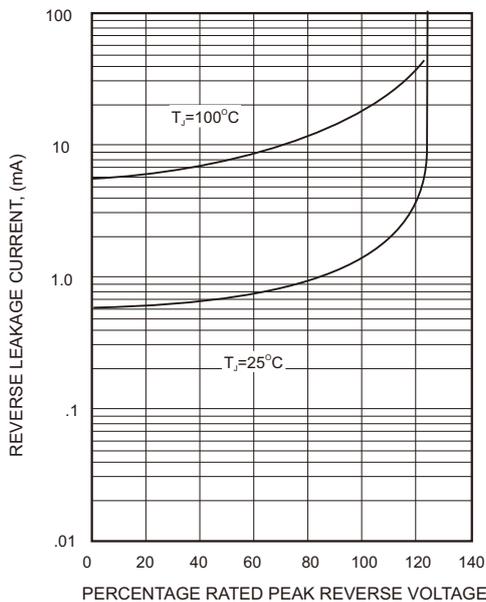
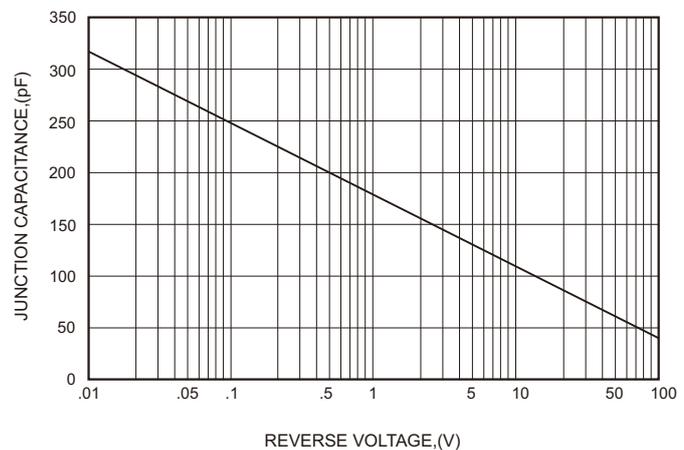
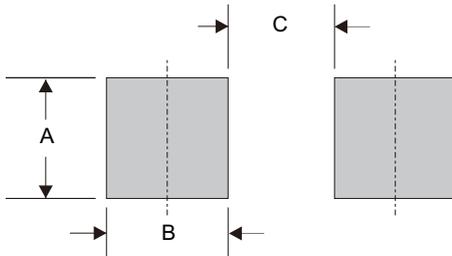


FIG.5-TYPICAL JUNCTION CAPACITANCE



■ SMA foot print



| A            | B            | C            |
|--------------|--------------|--------------|
| 0.068 (1.70) | 0.104 (2.60) | 0.060 (1.50) |

Dimensions in inches and (millimeters)

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