

MA2SV07

Silicon epitaxial planar type

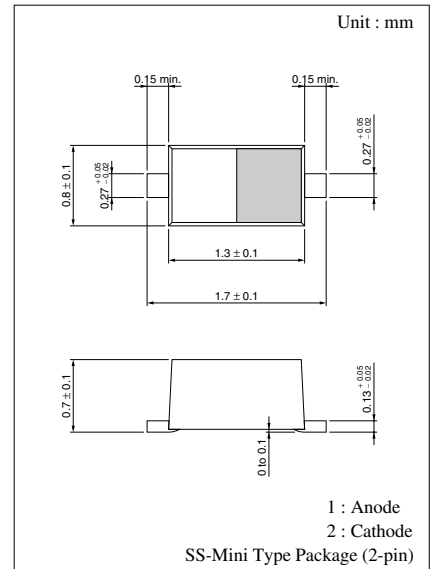
For VCO

■ Features

- Good linearity and large capacitance-ratio in C_D — V_R relation
- High frequency type by this low capacitance
- Small series resistance r_D
- SS-mini type package, allowing downsizing of equipment and automatic insertion through the taping package

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|----------------------|-----------|-------------|------------------|
| Reverse voltage (DC) | V_R | 6 | V |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |



Marking Symbol: 1A

■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|----------------------|-----------------------|--|------|-----|------|----------|
| Reverse current (DC) | I_R | $V_R = 5\text{ V}$ | | | 10 | nA |
| Diode capacitance | $C_{D(1V)}$ | $V_R = 1\text{ V}, f = 1\text{ MHz}$ | 2.88 | | 3.12 | pF |
| | $C_{D(3V)}$ | $V_R = 3\text{ V}, f = 1\text{ MHz}$ | 1.49 | | 1.62 | pF |
| Capacitance ratio | $C_{D(1V)}/C_{D(3V)}$ | | 1.84 | | 2.02 | — |
| Series resistance* | r_D | $V_R = 3\text{ V}, f = 470\text{ MHz}$ | | | 0.35 | Ω |

Note) 1. Rated input/output frequency: 470 MHz

2. *: r_f measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER