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# **MA2SV03**

### Silicon epitaxial planar type

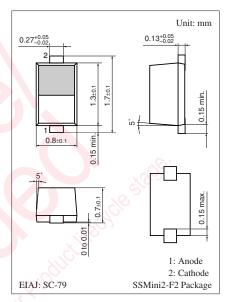
#### For VCO

#### ■ Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D V_R$  relation
- ullet Small series resistance  $r_D$
- SS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

#### ■ Absolute Maximum Ratings $T_a = 25$ °C

| Parameter            | Symbol         | Rating      | Unit |
|----------------------|----------------|-------------|------|
| Reverse voltage      | V <sub>R</sub> | 6           | V    |
| Junction temperature | Tj             | 150         | °C   |
| Storage temperature  | $T_{\rm stg}$  | -55 to +150 | °C   |



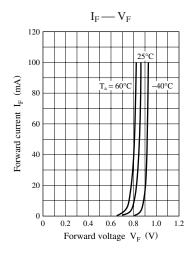
Marking Symbol: 4

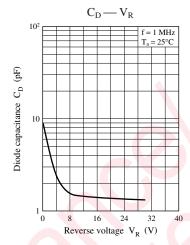
#### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

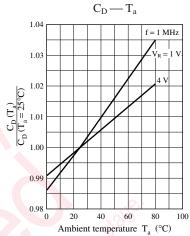
| Parameter           | Symbol                                 | Conditions                               | Min  | Тур | Max  | Unit |
|---------------------|--|--|------|-----|------|------|
| Reverse current     | $I_R$                                  | $V_R = 5 \text{ V}$                      | 100  | 0,  | 10   | nA   |
| Diode capacitance   | $C_{D(1V)}$                            | $V_R = 1 \text{ V, f} = 1 \text{ MHz}$   | 5.20 | )-  | 5.80 | pF   |
|                     | C <sub>D(4V)</sub>                     | $V_R = 4 \text{ V, f} = 1 \text{ MHz}$   | 2.10 |     | 2.58 |      |
| Capacitance ratio   | C <sub>D(1V)</sub> /C <sub>D(4V)</sub> | 618 9. 1100 100                          | 2.1  |     | 2.6  | _    |
| Series resistance * | $r_{\mathrm{D}}$                       | $V_R = 4 \text{ V, f} = 470 \text{ MHz}$ |      |     | 0.3  | Ω    |

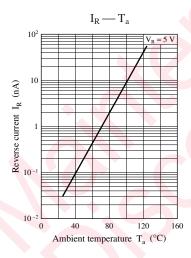
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

- 2. Absolute frequency of input and output is 470 MHz.
- 3. \*: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER









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