# imall

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# **MA2SV07**

#### Silicon epitaxial planar type

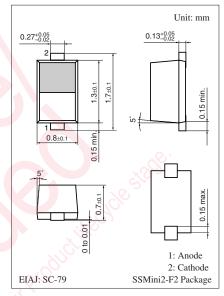
#### For VCO

#### Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D$   $V_R$  relation
- High frequency type by this low capacitance
- $\bullet$  Small series resistance  $r_{\rm D}$
- SS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

| Parameter            | Symbol           | Rating      | Unit |  |
|----------------------|------------------|-------------|------|--|
| Reverse voltage      | V <sub>R</sub>   | 6           | V    |  |
| Junction temperature | Tj               | 150         | °C   |  |
| Storage temperature  | T <sub>stg</sub> | -55 to +150 | °C   |  |



Marking Symbol: 1A

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

| Parameter           |   | Symbol                  | Conditions               | Min  | Тур | Max  | Unit |
|---------------------|---|-------------------------|--------------------------|------|-----|------|------|
| Reverse current     |   | IR                      | $V_R = 5 V$              | 20   | SOL | 10   | nA   |
| Diode capacitance   | • | C <sub>D(1V)</sub>      | $V_R = 1 V, f = 1 MHz$   | 2.88 | 0-  | 3.12 | pF   |
|                     | ċ | C <sub>D(3V)</sub>      | $V_R = 3 V, f = 1 MHz$   | 1.49 |     | 1.62 |      |
| Capacitance ratio   |   | $C_{D(1V)} / C_{D(3V)}$ |                          | 1.84 |     | 2.02 | _    |
| Series resistance * | 6 | r <sub>D</sub>          | $V_R = 3 V, f = 470 MHz$ |      |     | 0.35 | 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.

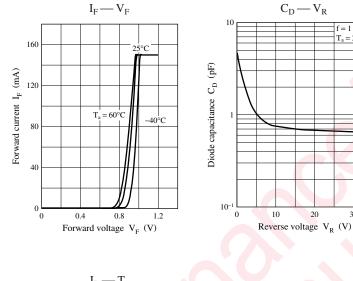
3. \*: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER

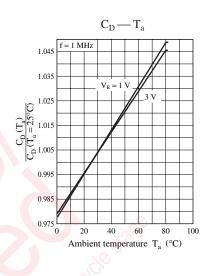
f = 1 MHz $T_a = 25^{\circ}C$ 

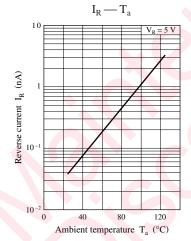
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#### MA2SV07

### Panasonic







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