

# MA2SV03

Silicon epitaxial planer type

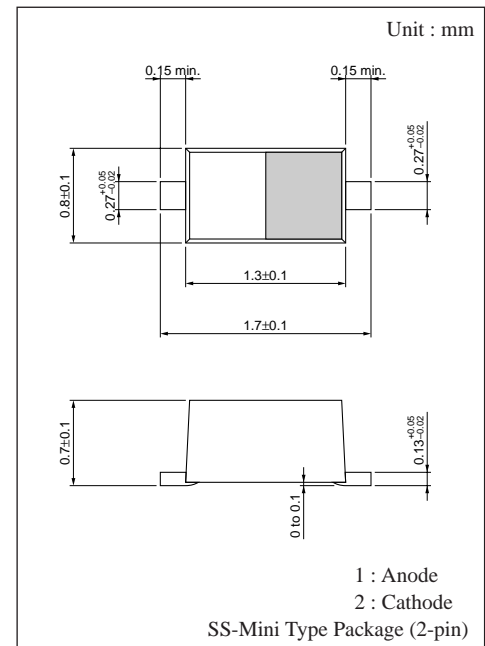
For VCO

## ■ Features

- Good linearity and large capacity ratio of  $V_R - C_D$
- Small series resistance  $r_D$
- SS-Mini package, enabling down-sizing of the equipment and automatic insertion through taping

## ■ 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 : 4

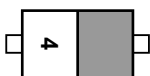
## ■ Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

| Parameter            | Symbol                | Condition                             | min  | typ | max  | Unit     |
|----------------------|-----------------------|---------------------------------------|------|-----|------|----------|
| Reverse current (DC) | $I_R$                 | $V_R = 5\text{V}$                     |      |     | 10   | nA       |
| Diode capacitance    | $C_{D(1V)}$           | $V_R = 1\text{V}, f = 1\text{MHz}$    | 5.20 |     | 5.80 | pF       |
|                      | $C_{D(4V)}$           | $V_R = 4\text{V}, f = 1\text{MHz}$    | 2.10 |     | 2.58 | pF       |
| Capacitance ratio    | $C_{D(1V)}/C_{D(4V)}$ |                                       | 2.1  |     | 2.6  | —        |
| Series resistance    | $r_D^*$               | $V_R = 4\text{pF}, f = 470\text{MHz}$ |      |     | 0.3  | $\Omega$ |

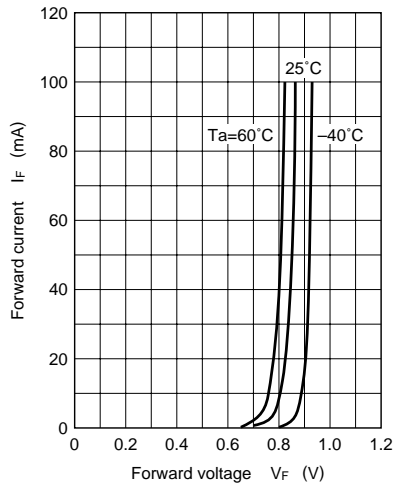
Note 1 : Rated input/output frequency : 470MHz

2 : \*  $r_D$  measurement device : YHP MODEL 4191A RF IMPEDANCE ANALYZER

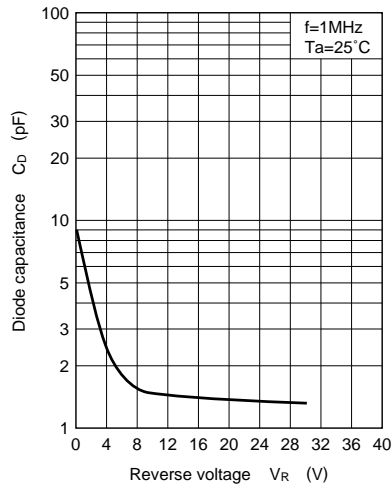
## ■ Marking



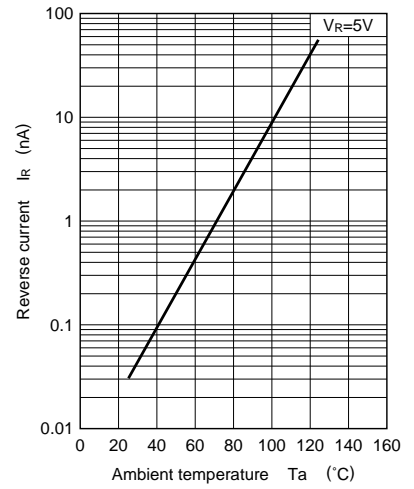
$I_F - V_F$



$C_D - V_R$



$I_R - T_a$



$C_D - T_a$

