# **MA2SV03**

### Silicon epitaxial planar type

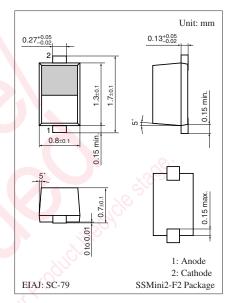
#### For VCO

#### ■ Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D V_R$  relation
- Small series resistance r<sub>D</sub>
- 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	$T_{stg}$	-55 to +150	°C



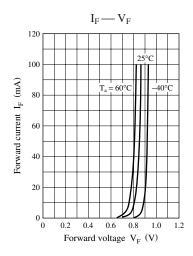
Marking Symbol: 4

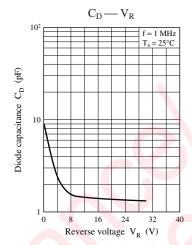
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

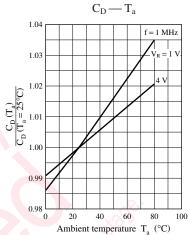
Reverse current $I_R$ $V_R = 5 \text{ V}$ 10           Diode capacitance $C_{D(1V)}$ $V_R = 1 \text{ V}, f = 1 \text{ MHz}$ 5.20         5.80 $C_{D(4V)}$ $V_R = 4 \text{ V}, f = 1 \text{ MHz}$ 2.10         2.58           Capacitance ratio $C_{D(1V)}/C_{D(4V)}$ 2.1         2.6           Series resistance * $V_R = 4 \text{ V}, f = 470 \text{ MHz}$ 0.3	Unit	Max	Тур	Min	Conditions	Symbol	Parameter
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	nA	10	0	00	$V_R = 5 \text{ V}$	$I_R$	Reverse current
Capacitance ratio $C_{D(1V)}/C_{D(4V)}$ 2.1 2.6	pF	5.80	<b>)</b>	5.20	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$	C <sub>D(1V)</sub>	Diode capacitance
D(11) - D(11)		2.58		2.10	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	C <sub>D(4V)</sub>	
Sories registance * $V = 4V = 470 \text{ MHz}$	_	2.6		2.1	612 P. (C)	$C_{D(1V)} / C_{D(4V)}$	Capacitance ratio
Series resistance $r_D = v_R - 4 v$ , $r_L = 4/0 \text{ MHz}$ 0.3	Ω	0.3			$V_R = 4 \text{ V, f} = 470 \text{ MHz}$	$r_{\mathrm{D}}$	Series resistance *

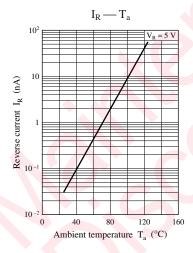
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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