## **MA27V03**

## Silicon epitaxial planar type

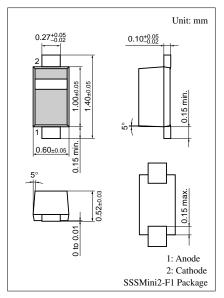
#### For VCO

#### ■ Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D V_R$  relation
- Small series resistance r<sub>D</sub>
- SSS-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 (DC)	$V_R$	6	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C



Marking Symbol: 3

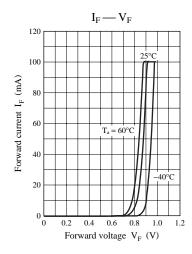
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

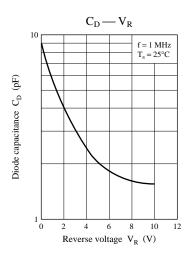
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 5 V$			10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$	5.20		5.80	pF
	C <sub>D(4V)</sub>	$V_R = 4 V, f = 1 MHz$	2.10		2.58	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(4V)</sub>		2.1	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

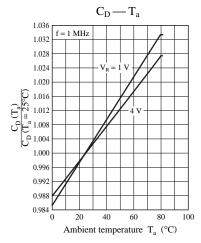
Note) 1. Rated input/output frequency: 470 MHz

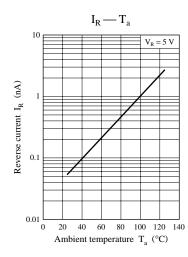
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<sup>2. \*:</sup> Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER









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