## **MA27V02**

## Silicon epitaxial planar type

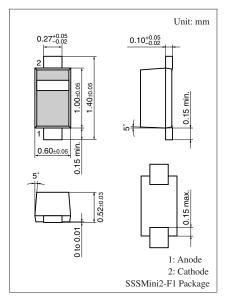
#### For VCO

#### ■ 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	V <sub>R</sub>	6	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C



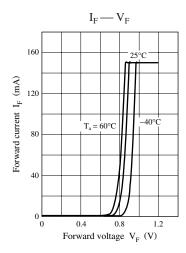
Marking Symbol: 2

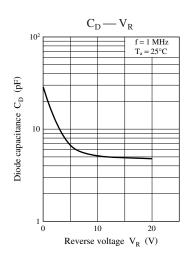
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

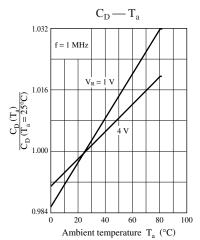
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 5 V$			10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$	18.0		20.0	pF
	C <sub>D(4V)</sub>	$V_R = 4 \text{ V}, \text{ f} = 1 \text{ MHz}$	7.3		9.0	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(4V)</sub>		2.1		2.6	_
Series resistance *	$r_{\mathrm{D}}$	$V_R = 4 \text{ V, f} = 470 \text{ MHz}$			0.3	Ω

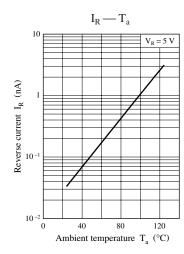
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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