## **MA27V05**

### Silicon epitaxial planar type

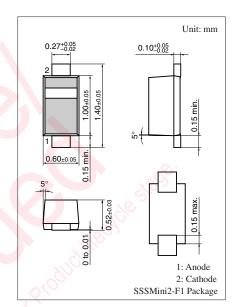
#### For VCO

#### ■ 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>	10	V
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C



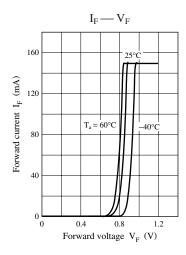
Marking Symbol: 5

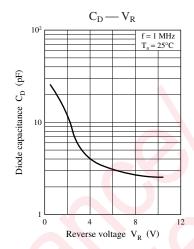
### ■ Electrical Characteristics $T_a = 25$ °C ± 3°C

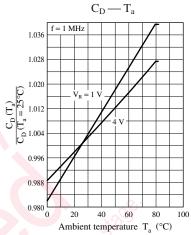
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 10 \text{ V}$	1000	0//	10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$	18.5	0.5	20.5	pF
	$C_{D(4V)}$	$V_R = 4 \text{ V, f} = 1 \text{ MHz}$	3.6		4.1	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(4V)</sub>	50: 60: 10	4.7			
Series resistance *	r <sub>D</sub>	$V_R = 4 \text{ V, f} = 470 \text{ MHz}$			0.65	Ω

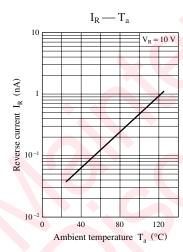
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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