# MA27V01

## Silicon epitaxial planar type

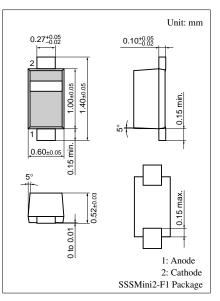
### For VCO

#### Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D$   $V_R$  relation
- $\bullet$  Small series resistance  $r_{\rm D}$
- SSS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

### Absolute Maximum Ratings $T_a = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V <sub>R</sub>	6	V
Junction temperature	Tj	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C



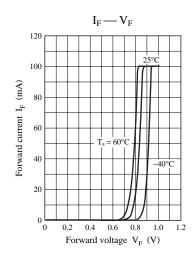
Marking Symbol: 1

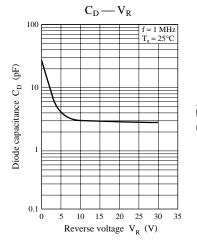
### Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

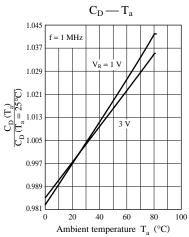
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current (DC)	I <sub>R</sub>	$V_R = 6 V$			10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 V, f = 1 MHz$	15.0		17.0	pF
	C <sub>D(3V)</sub>	$V_R = 3 V, f = 1 MHz$	5.0		7.0	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(3V)</sub>		2.2			
Series resistance *	r <sub>D</sub>	$C_{\rm D} = 9 \text{ pF}, \text{ f} = 470 \text{ MHz}$			1.0	Ω

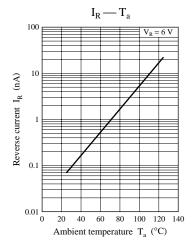
Note) 1. Rated input/output frequency: 470 MHz

2. \*: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER









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