# MA27V20

### Silicon epitaxial planar type

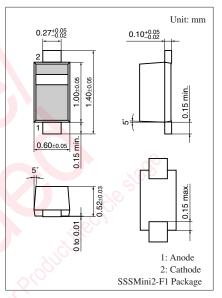
#### For VCO

#### Features

- $\bullet$  Good linearity and large capacitance-ratio in  $C_D$   $V_R$  relation
- Small series resistance r<sub>D</sub>

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

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



Marking Symbol: T

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

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Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Reverse current		IR	$V_R = 5 V$	00	SOL	10	nA
Diode capacitance		C <sub>D(1V)</sub>	$V_R = 1 V, f = 1 MHz$	18.0	0	19.5	pF
		C <sub>D(3V)</sub>	$V_R = 3 V, f = 1 MHz$	9.20		9.90	
Capacitance ratio		C <sub>D(1V)</sub> /C <sub>D(3V)</sub>		1.89		2.04	—
Series resistance *	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	r <sub>D</sub>	$V_{\rm R} = 3 \text{ V}, \text{ f} = 470 \text{ MHz}$			0.35	Ω

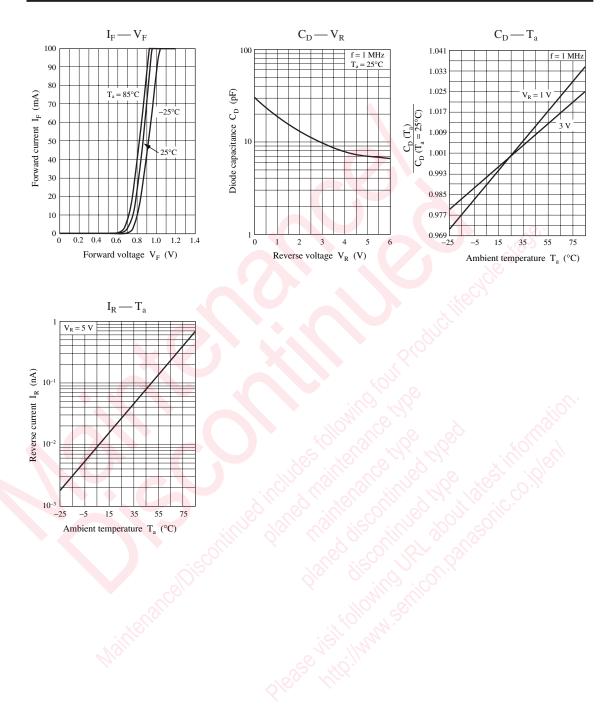
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

2. Absolute frequency of input and output is 470 MHz

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

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