## **MA27V13**

## Silicon epitaxial planar type

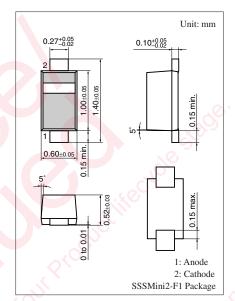
#### For VCO

#### ■ Features

- ullet Good linearity and large capacitance-ratio in  $C_D V_R$  relation
- High frequency type by this low capacitance
- 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>	12	V
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-55 to +125	°C



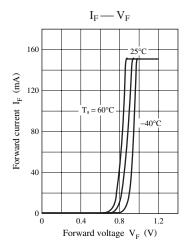
Marking Symbol: F

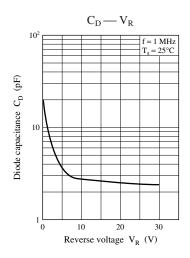
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

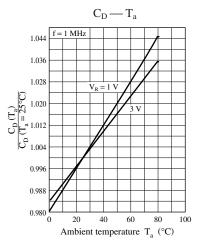
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 10 \text{ V}$		10°	10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$	11.12		12.29	pF
	C <sub>D(3V)</sub>	$V_R = 3 \text{ V, f} = 1 \text{ MHz}$	5.25		5.81	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(3V)</sub>	and dis as	2.01		2.23	_
Series resistance *	$r_{\mathrm{D}}$	$V_R = 3 \text{ V, f} = 470 \text{ MHz}$			0.40	Ω

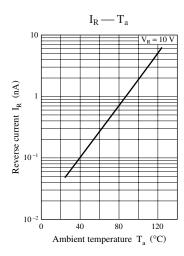
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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