## **MA27V15**

## Silicon epitaxial planar type

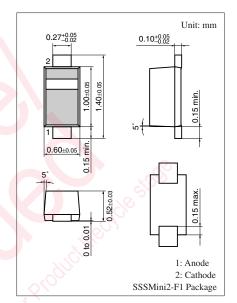
#### For VCO

#### ■ Features

- Ultraminiature Package 1.0 mm × 0.6 mm (height: 0.52 mm), optimum for high-density mounting and high-speed mounting
- ullet Good linearity and large capacitance-ratio in  $C_D V_R$  relation

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Reverse voltage	$V_R$	6	V	
Junction temperature	T <sub>j</sub>	125	°C	
Storage temperature	$T_{stg}$	-55 to +125	°C	



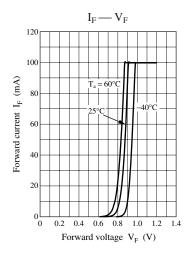
Marking Symbol: J

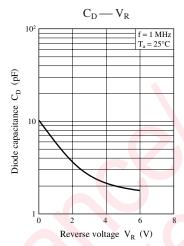
### ■ Electrical Characteristics $T_a = 25$ °C ± 3°C

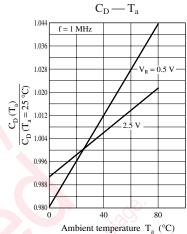
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 5 \text{ V}$	00,	30,	10	nA
Diode capacitance	$C_{\mathrm{D0.5V}}$	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$	7.30		7.91	pF
	$C_{D2.5V}$	$V_R = 2.5 \text{ V, } f = 1 \text{ MHz}$	2.98		3.23	
Capacitance ratio	C <sub>D0.5V</sub> /C <sub>D2.5V</sub>	612 0. 1100	2.35		2.55	_
Series resistance *	$r_{\mathrm{D}}$	$V_R = 1 \text{ V, f} = 470 \text{ MHz}$			0.45	Ω

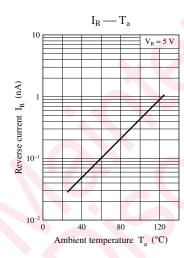
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

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









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