## **MA27V18**

## Silicon epitaxial planar type

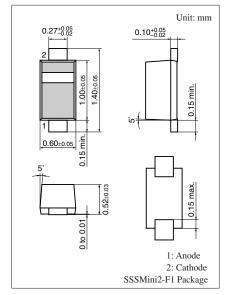
#### For VCO

#### ■ Features

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

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

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



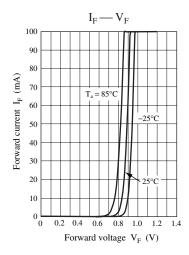
Marking Symbol: P

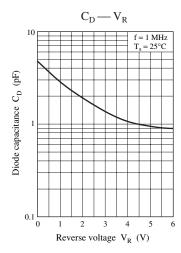
## ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

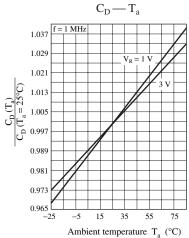
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	$I_R$	$V_R = 5 V$			10	nA
Diode capacitance	C <sub>D(1V)</sub>	$V_R = 1 V, f = 1 MHz$	2.78		3.00	pF
	C <sub>D(3V)</sub>	$V_R = 3 V$ , $f = 1 MHz$	1.31		1.41	
Capacitance ratio	C <sub>D(1V)</sub> /C <sub>D(3V)</sub>		2.04		2.21	
Series resistance *	$r_{\mathrm{D}}$	$V_R = 3 \text{ V, f} = 470 \text{ MHz}$			0.3	Ω

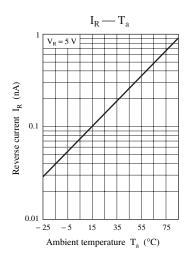
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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