## **MA27V18**

## Silicon epitaxial planar type

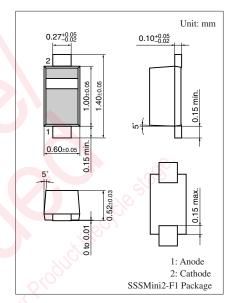
#### For VCO

#### ■ 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	$T_{stg}$	-55 to +125	°C	



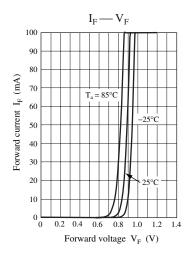
Marking Symbol: P

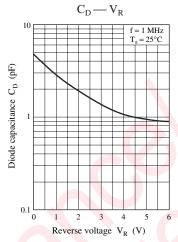
### ■ Electrical Characteristics $T_a = 25$ °C $\pm 3$ °C

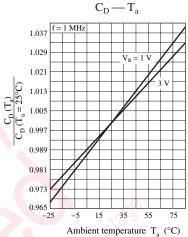
Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Reverse current		$I_R$	$V_R = 5 \text{ V}$	100	0,,	10	nA
Diode capacitance		C <sub>D(1V)</sub>	$V_R = 1 \text{ V, f} = 1 \text{ MHz}$	2.78	). ).	3.00	pF
		$C_{D(3V)}$	$V_R = 3 V, f = 1 MHz$	1.31		1.41	
Capacitance ratio		C <sub>D(1V)</sub> /C <sub>D(3V)</sub>	610 C. 1100 1CC	2.04		2.21	_
Series resistance *	100°	r <sub>D</sub>	$V_R = 3 \text{ V, f} = 470 \text{ MHz}$			0.3	Ω

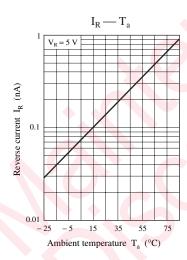
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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