

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## **MA27V16**

## Silicon epitaxial planar type

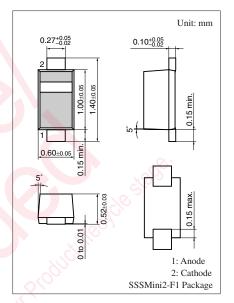
#### For VCO

#### 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	Tj	125	°C	
Storage temperature	$T_{stg}$	-55 to +125	°C	



Marking Symbol: K

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

Parameter		Symbol	Conditions	Min	Тур	Max	Unit
Reverse current		I <sub>R</sub>	$V_R = 5 \text{ V}$	1000	0,,	10	nA
Diode capacitance		C <sub>D(1V)</sub>	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$	17.45	0.	18.95	pF
		C <sub>D(3V)</sub>	$V_R = 3 \text{ V, f} = 1 \text{ MHz}$	7.73		8.37	
Capacitance ratio		C <sub>D(1V)</sub> /C <sub>D(3V)</sub>	95: 65: 6	2.17		2.35	_
Series resistance *	1/Cp.	$r_{\mathrm{D}}$	$V_R = 3 \text{ V, f} = 470 \text{ MHz}$			0.30	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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