Variable Capacitance Diodes

MA27V23

Silicon epitaxial planar type

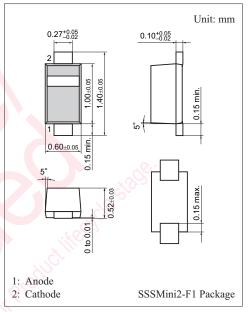
For VCO

Features

- \bullet Good linearity and large capacitance-ratio in $C_D V_R$ relation
- Low series resistance r_D

Absolute Maximum Ratings $T_a = 25^{\circ}C$

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: Y

Electrical Characteristics $T_a = 25^{\circ}C \pm 3^{\circ}C$

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Reverse current	IR	$V_R = 5 V_{C}$	2		10	nA
Diode capacitance	C _{D(1V)}	$V_R = 1 V, f = 1 MHz$	2.28	S. X	2.46	pF
	C _{D(4V)}	$V_R = 4 V, f = 1 MHz$	1.00		1.10	
Capacitance ratio	C _{D(1V)} / C _{D(4V)}		2.17	RIP I	2.34	
Series resistance *	r _D	$V_{R} = 4 V, f = 470 MHz$. ₁ 25		0.35	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 4191A RF IMPEDANCE ANALYZER

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