MA27V23

Silicon epitaxial planar type

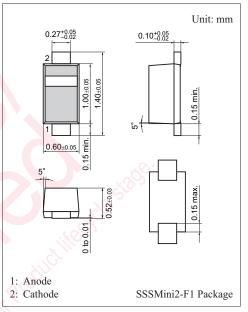
For VCO

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

Symbol	Conditions	Min	Тур	Max	Unit
IR	$V_R = 5 V_{C}$	8		10	nA
C _{D(1V)}	$V_{R} = 1 V, f = 1 MHz$	2.28	ŝ	2.46	pF
Diode capacitance	$V_{R} = 4 V, f = 1 MHz$	1.00		1.10	
C _{D(1V)} / C _{D(4V)}		2.17		2.34	_
r _D	$V_{R} = 4 V, f = 470 MHz$	n los		0.35	Ω
	$\begin{tabular}{c} I_R \\ \hline C_{D(1V)} \\ \hline C_{D(4V)} \\ \hline C_{D(1V)} / C_{D(4V)} \end{tabular}$	$I_{R} V_{R} = 5 V$ $C_{D(1V)} V_{R} = 1 V, f = 1 MHz$ $C_{D(4V)} V_{R} = 4 V, f = 1 MHz$ $C_{D(1V)} / C_{D(4V)}$	IR VR = 5 V $C_{D(1V)}$ VR = 1 V, f = 1 MHz 2.28 $C_{D(4V)}$ VR = 4 V, f = 1 MHz 1.00 $C_{D(1V)} / C_{D(4V)}$ 2.17	IR VR = 5 V IR $C_{D(1V)}$ $V_R = 1 V$, $f = 1 MHz$ 2.28 $C_{D(4V)}$ $V_R = 4 V$, $f = 1 MHz$ 1.00 $C_{D(1V)} / C_{D(4V)}$ 2.17	IR VR = 5 V 10 CD(1V) VR = 1 V, f = 1 MHz 2.28 2.46 CD(4V) VR = 4 V, f = 1 MHz 1.00 1.10 CD(1V) / CD(4V) 2.17 2.34

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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