MA27V07

Silicon epitaxial planar type

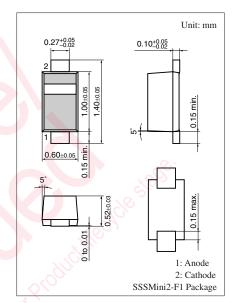
For VCO

■ Features

- \bullet Good linearity and large capacitance-ratio in $C_D V_R$ relation
- High frequency type by this low capacitance
- SSS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

■ 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	



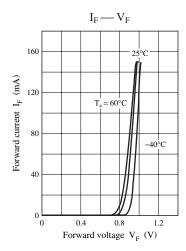
Marking Symbol: 7

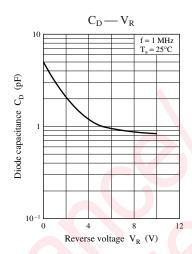
■ Electrical Characteristics $T_a = 25$ °C ± 3°C

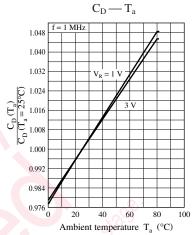
Symbol	Conditions	Min	Тур	Max	Unit
I_R	$V_R = 5 \text{ V}$	1000	0,,	10	nA
$C_{D(1V)}$	$V_R = 1 \text{ V, } f = 1 \text{ MHz}$	2.88	5-	3.12	pF
$C_{D(3V)}$	$V_R = 3 \text{ V, f} = 1 \text{ MHz}$	1.49		1.62	
$C_{D(1V)}/C_{D(3V)}$	95: 67: 10	1.84		2.02	_
r _D	$V_R = 3 \text{ V, f} = 470 \text{ MHz}$			0.35	Ω
	$\begin{array}{c} I_{R} \\ C_{D(1V)} \\ C_{D(3V)} \\ C_{D(1V)} / C_{D(3V)} \end{array}$	$I_{R} \qquad V_{R} = 5 \text{ V}$ $C_{D(1V)} \qquad V_{R} = 1 \text{ V}, f = 1 \text{ MHz}$ $C_{D(3V)} \qquad V_{R} = 3 \text{ V}, f = 1 \text{ MHz}$ $C_{D(1V)} / C_{D(3V)}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$I_{R} \qquad V_{R} = 5 \text{ V}$ $C_{D(1V)} \qquad V_{R} = 1 \text{ V}, f = 1 \text{ MHz} \qquad 2.88$ $C_{D(3V)} \qquad V_{R} = 3 \text{ V}, f = 1 \text{ MHz} \qquad 1.49$ $C_{D(1V)} / C_{D(3V)} \qquad 1.84$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

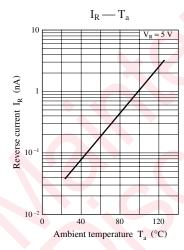
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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









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