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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.

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# MA27V05

## Silicon epitaxial planar type

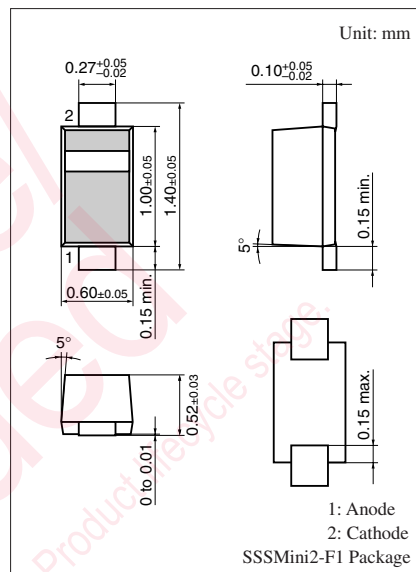
For VCO

### ■ Features

- Good linearity and large capacitance-ratio in  $C_D - V_R$  relation
- Small series resistance  $r_D$
- SSS-Mini type package, allowing downsizing of equipment and automatic insertion through the taping package

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

Parameter	Symbol	Rating	Unit
Reverse voltage	$V_R$	10	V
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +125	$^\circ\text{C}$



Marking Symbol: 5

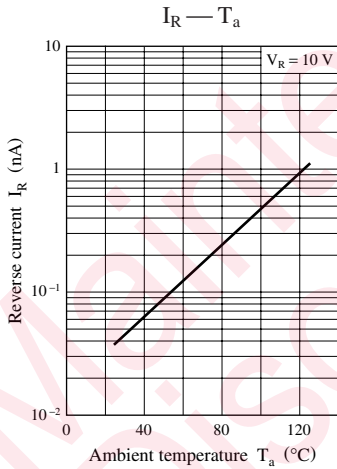
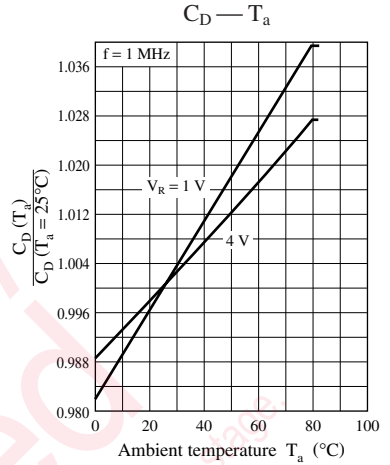
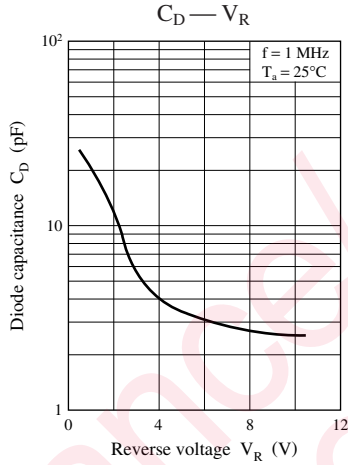
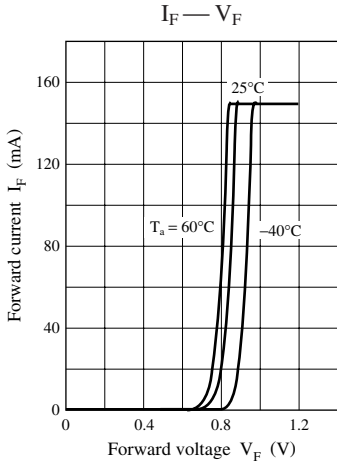
### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	$I_R$	$V_R = 10\text{ V}$			10	nA
Diode capacitance	$C_{D(1V)}$	$V_R = 1\text{ V}, f = 1\text{ MHz}$	18.5		20.5	pF
	$C_{D(4V)}$	$V_R = 4\text{ V}, f = 1\text{ MHz}$	3.6		4.1	
Capacitance ratio	$C_{D(1V)} / C_{D(4V)}$		4.7			—
Series resistance *	$r_D$	$V_R = 4\text{ V}, f = 470\text{ MHz}$			0.65	$\Omega$

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



Maintenance/Discontinued includes following four Product lifecycle state:  
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 maintenance type  
 planned discontinued type  
 discontinued type  
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