

MA27V12

Silicon epitaxial planar type

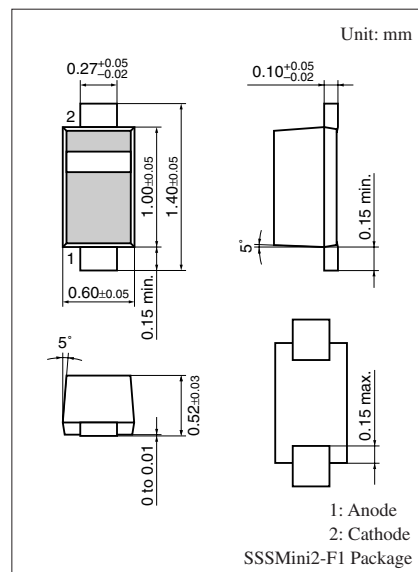
For VCO

■ Features

- Good linearity and large capacitance-ratio in $C_D - V_R$ relation
- High frequency type by this low capacitance
- Ultraminiature Package 1.0 mm × 0.6 mm (height: 0.52 mm), optimum for high-density mounting and high-speed mounting

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

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	8	V
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$



Marking Symbol: E

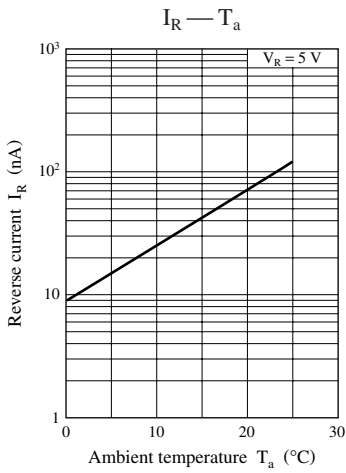
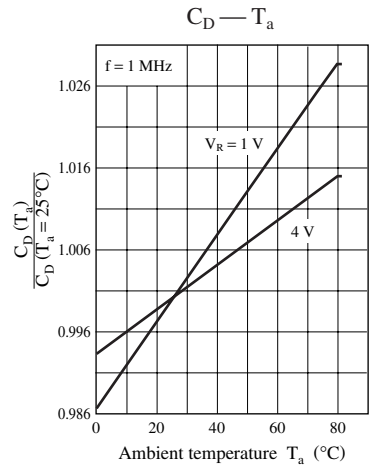
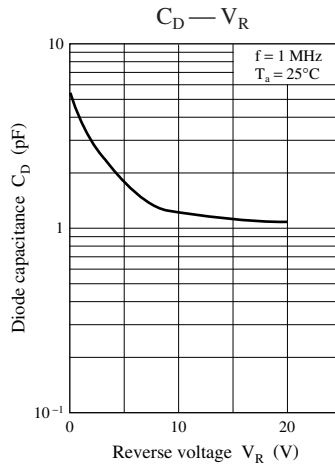
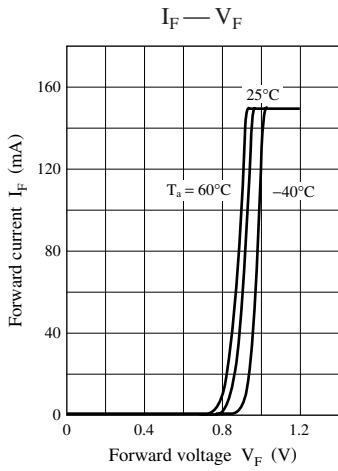
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 5\text{ V}$			10	nA
Diode capacitance	$C_{D(1V)}$	$V_R = 1\text{ V}, f = 1\text{ MHz}$	3.60		3.90	pF
	$C_{D(4V)}$	$V_R = 4\text{ V}, f = 1\text{ MHz}$	1.97		2.14	
Capacitance ratio	$C_{D(1V)} / C_{D(4V)}$		1.75		1.90	—
Series resistance *	r_D	$V_R = 4\text{ V}, f = 470\text{ MHz}$			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 MODEL 4191A RF IMPEDANCE ANALYZER



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