

MA27V13

Silicon epitaxial planar type

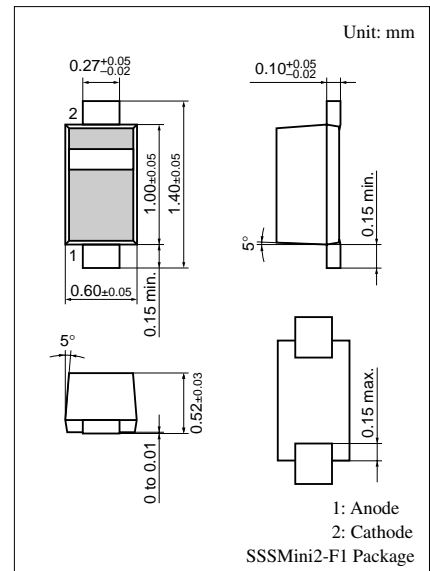
For VCO

■ Features

- Good linearity and large capacitance-ratio in $C_D - V_R$ relation
- High frequency type by this low capacitance
- 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 (DC)	V_R	12	V
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +125	$^\circ\text{C}$



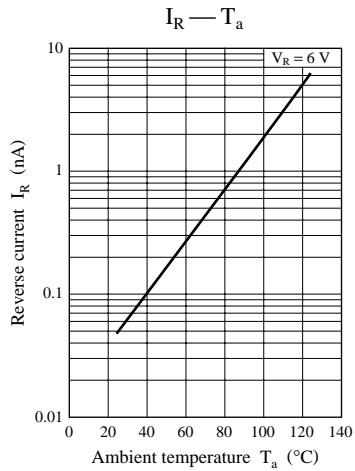
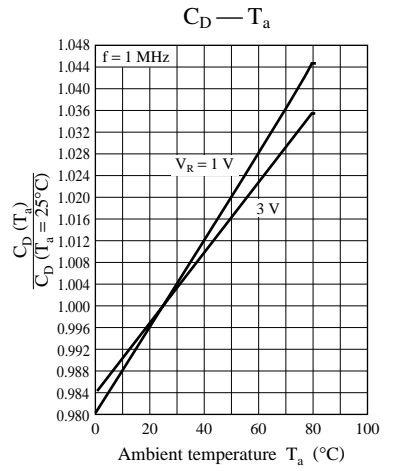
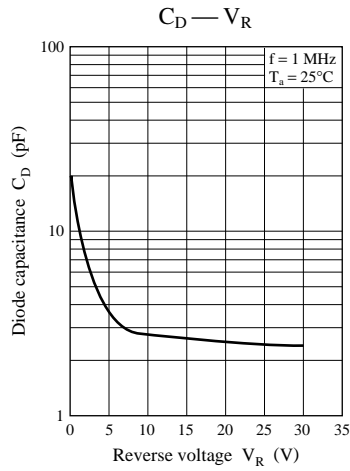
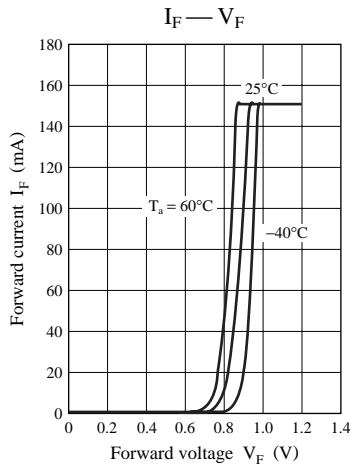
Marking Symbol: F

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	$V_R = 10 \text{ V}$			10	nA
Diode capacitance	$C_{D(1V)}$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	11.12		12.29	pF
	$C_{D(3V)}$	$V_R = 3 \text{ V}, f = 1 \text{ MHz}$	5.25		5.81	
Capacitance ratio	$C_{D(1V)}/C_{D(3V)}$		2.01		2.23	—
Series resistance *	r_D	$V_R = 3 \text{ V}, f = 470 \text{ MHz}$			0.40	Ω

Note) 1. Rated input/output frequency: 470 MHz

2. *: Measuring instrument; YHP MODEL 4191A RF IMPEDANCE ANALYZER



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