

# MA27V15

## Silicon epitaxial planar type

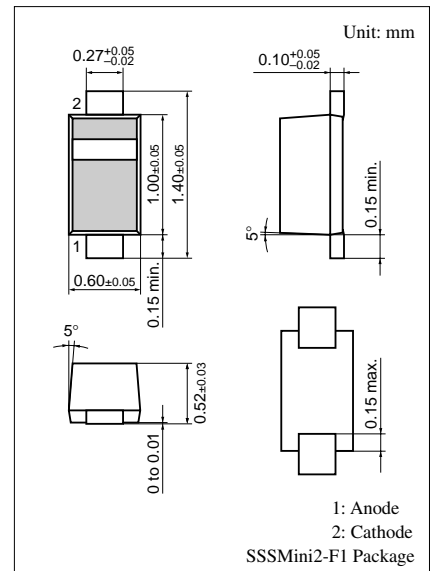
For VCO

### ■ Features

- Good linearity and large capacitance-ratio in  $C_D - V_R$  relation
- 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 (DC)	$V_R$	60	V
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{\text{stg}}$	-55 to +150	$^\circ\text{C}$



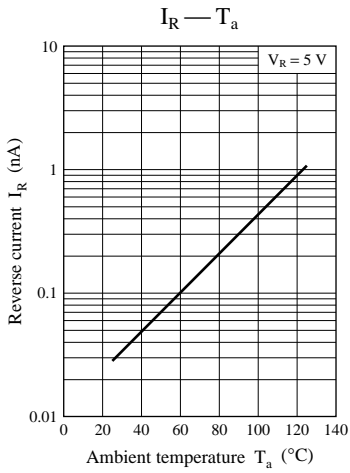
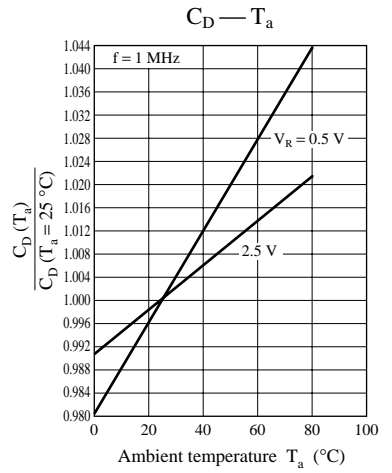
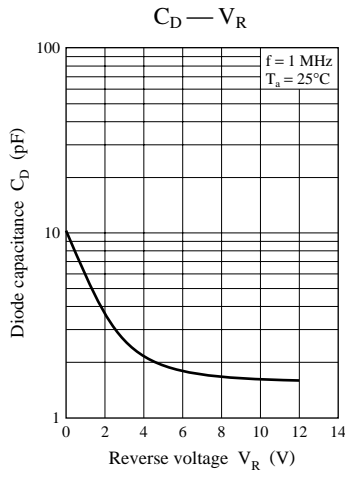
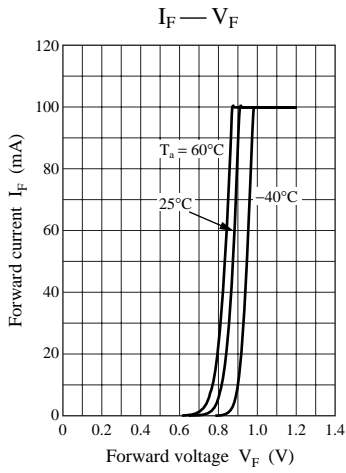
Marking Symbol: J

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	$I_R$	$V_R = 5\text{ V}$			10	nA
Diode capacitance	$C_{D(0.5V)}$	$V_R = 0.5\text{ V}, f = 1\text{ MHz}$	7.30		7.91	pF
	$C_{D(2.5V)}$	$V_R = 2.5\text{ V}, f = 1\text{ MHz}$	2.98		3.23	
Capacitance ratio	$C_{D(0.5V)}/C_{D(2.5V)}$		2.35		2.55	—
Series resistance *	$r_D$	$V_R = 1\text{ V}, f = 470\text{ MHz}$			0.45	$\Omega$

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

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



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