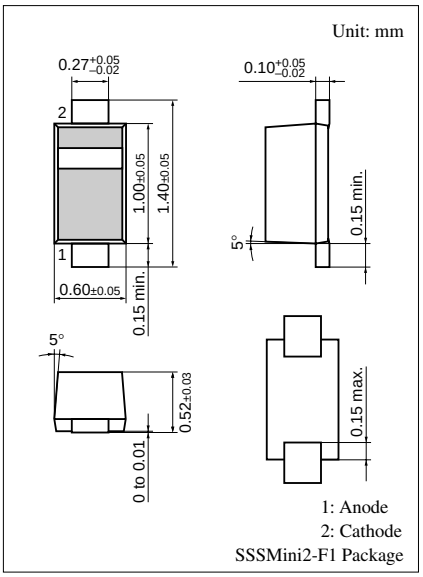
MA27V07

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



Marking Symbol: 7

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter	Symbol	Rating	Unit
Reverse voltage (DC)	V_R	6	V
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

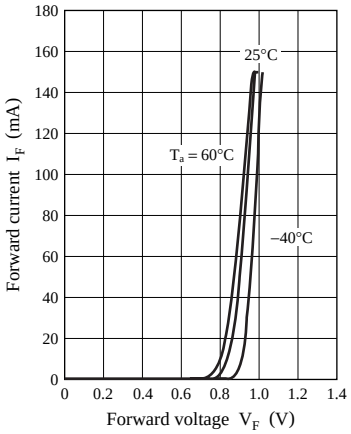
■ Electrical Characteristics $T_a = 25°C \pm 3°C$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current (DC)	I_R	V_R = 5 V			10	nA
Diode capacitance	$C_{D(1V)}$	V_R = 1 V, f = 1 MHz	2.88		3.12	pF
	$C_{D(3V)}$	V_R = 3 V, f = 1 MHz	1.49		1.62	
Capacitance ratio	$C_{D(1V)}/C_{D(3V)}$		1.84		2.02	—
Series resistance *	r_D	V_R = 3 V, f = 470 MHz			0.35	Ω

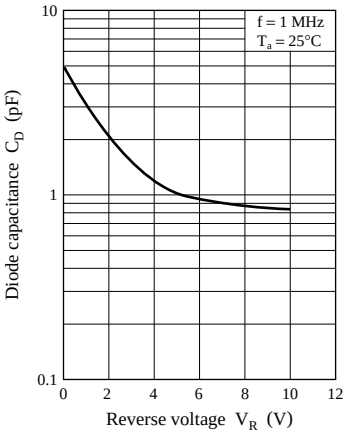
Note) 1. Rated input/output frequency: 470 MHz

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

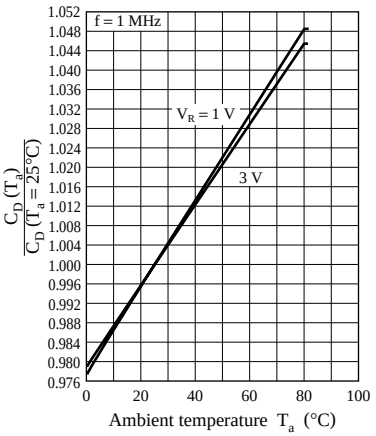
I_F — V_F



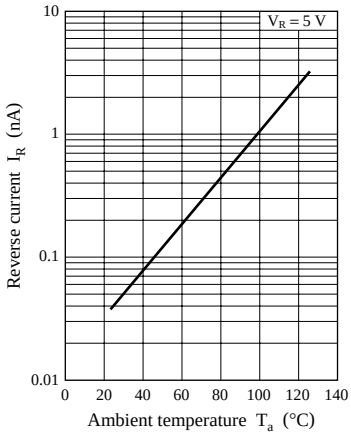
C_D — V_R



C_D — T_a



I_R — T_a



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