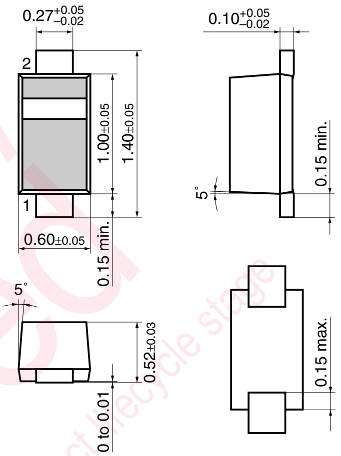
MA27V15

Silicon epitaxial planar type

For VCO

Unit: mm



1: Anode
2: Cathode
SSSMini2-F1 Package

Marking Symbol: J

■ Features

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

■ Absolute Maximum Ratings $T_a = 25°C$

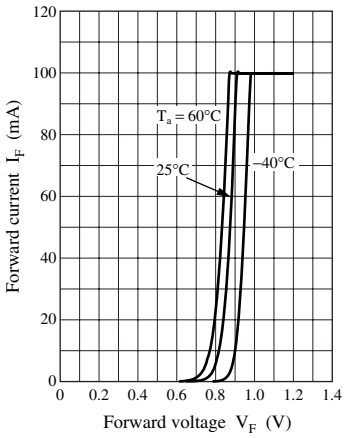
Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	6	V
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	−55 to +125	°C

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

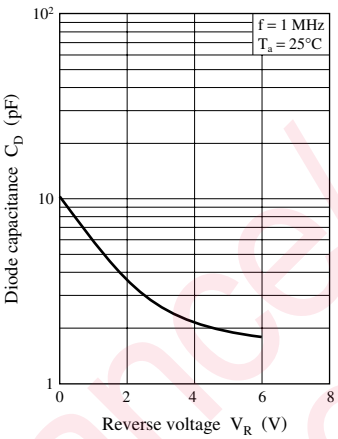
Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Reverse current	I_R	$V_R = 5$ V			10	nA
Diode capacitance	$C_{D0.5V}$	$V_R = 0.5$ V, f = 1 MHz	7.30		7.91	pF
	$C_{D2.5V}$	$V_R = 2.5$ V, f = 1 MHz	2.98		3.23	
Capacitance ratio	$C_{D0.5V}/C_{D2.5V}$		2.35		2.55	—
Series resistance *	r_D	$V_R = 1$ V, f = 470 MHz			0.45	Ω

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.
2. Absolute frequency of input and output is 470 MHz.
3. *: Measuring instrument: YHP MODEL 4191A RF IMPEDANCE ANALYZER

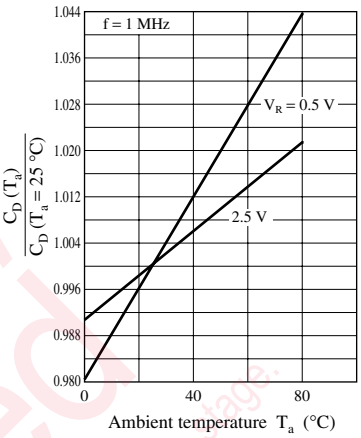
I_F — V_F



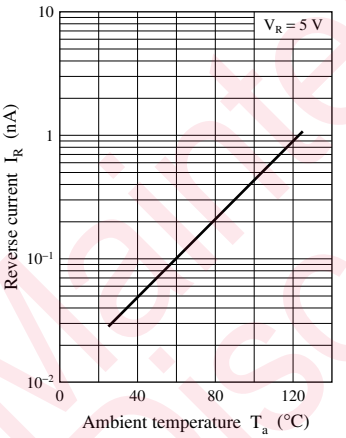
C_D — V_R



C_D — T_a



I_R — T_a



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