Ordering number : ENA0076



## **ON Semiconductor** DATA SHEET

# Diffused Junction Type Silicon Diode

# **SVC270**— Varactor Diode for FM Receiver Electronic **Tuning Applications**

### **Features**

- Twin type varactor diode having an excellent large input characteristic, for use in FM electronic tuning applications.
- · Small MCPH package permits SVC270-applied sets to be compact and slim.
- · Possible to be shipped in tape reel packaging, which facilitates automatic insertion.
- · High Q.

### **Specifications**

### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	VR		16	V
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

### Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Offic
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current	IR	V <sub>R</sub> =10V			50	nA
Interterminal Capacitance*1	C2.0V	V <sub>R</sub> =2.0V, f=1MHz	44.0		46.5	pF
	C8.0V	V <sub>R</sub> =8.0V, f=1MHz	25.1		28.2	pF
Quality Factor	Q	V <sub>R</sub> =3.0V, f=100MHz	100			
Capacitance Ratio	CR	C2.0V / C8.0V	1.65		1.75	
Matching Tolerance*2	ΔCm	V <sub>R</sub> =2.0V, f=1MHz (Cmax-Cmin) / Cmin×100			2.5	%

Marking: V4

Note)\*1 : Capacitance value per each diode.

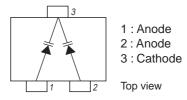
\*2 : Matching Tolerance is valid for the devices in one taping reel.

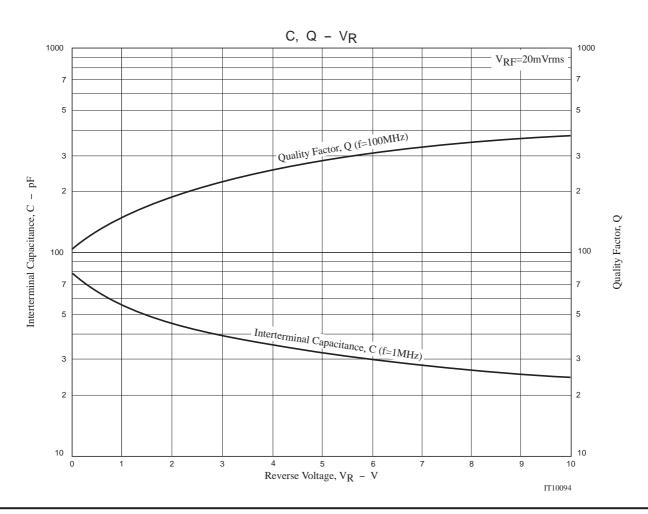
### **Package Dimensions**

unit : mm 7019-002

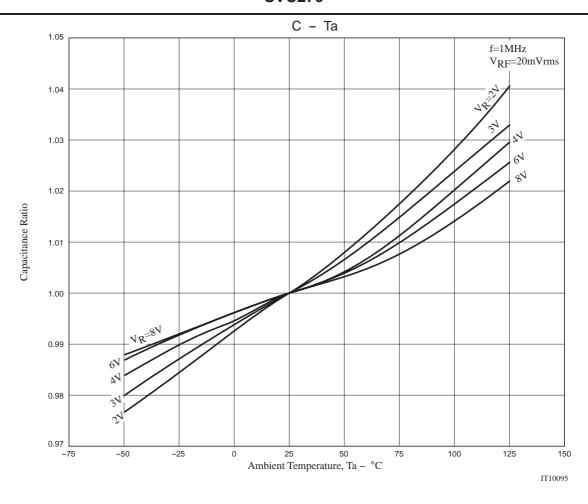
# Bottom View 0.3 0.15 1 : Anode 2 : Anode 3 : Cathode Top View SANYO : MCPH3

### **Electrical Connection**





### **SVC270**



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