



ON Semiconductor®

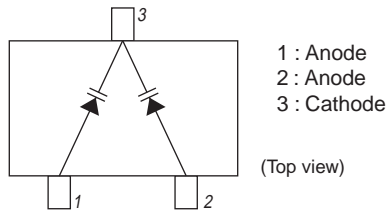
# ON Semiconductor DATA SHEET

## SVC230 — Diffused Junction Type Silicon Diode Varactor Diode for FM Receiver Electronic Tuning Applications

### Features

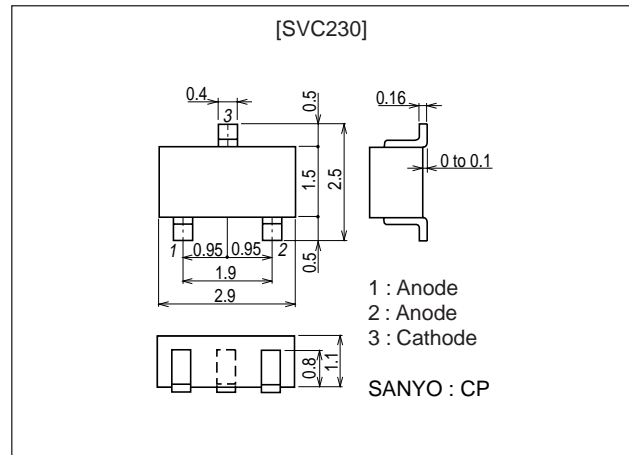
- Twin type varactor diode having an excellent large input characteristic, for use in FM electronic tuning applications.
- Small CP package permits SVC230 applied sets to be compact and slim.
- Possible to be shipped in tape reel packaging, which facilitates automatic insertion.
- High Q.

### Electrical Connection



### Package Dimensions

unit : mm  
1169A



### Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Reverse Voltage	V <sub>R</sub>		16	V
Junction Temperature	T <sub>j</sub>		125	°C
Storage Temperature	T <sub>stg</sub>		-55 to +125	°C

Electrical Characteristics at Ta=25°C

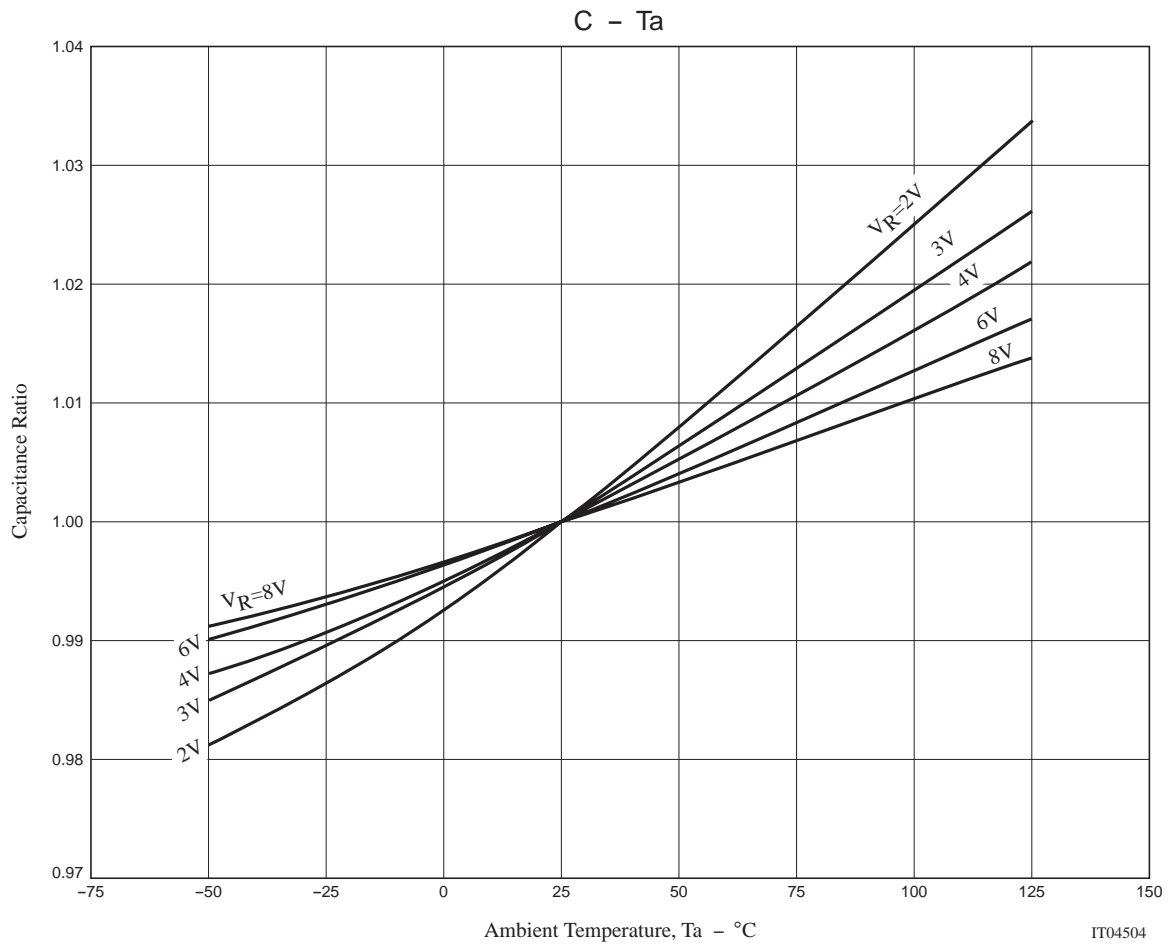
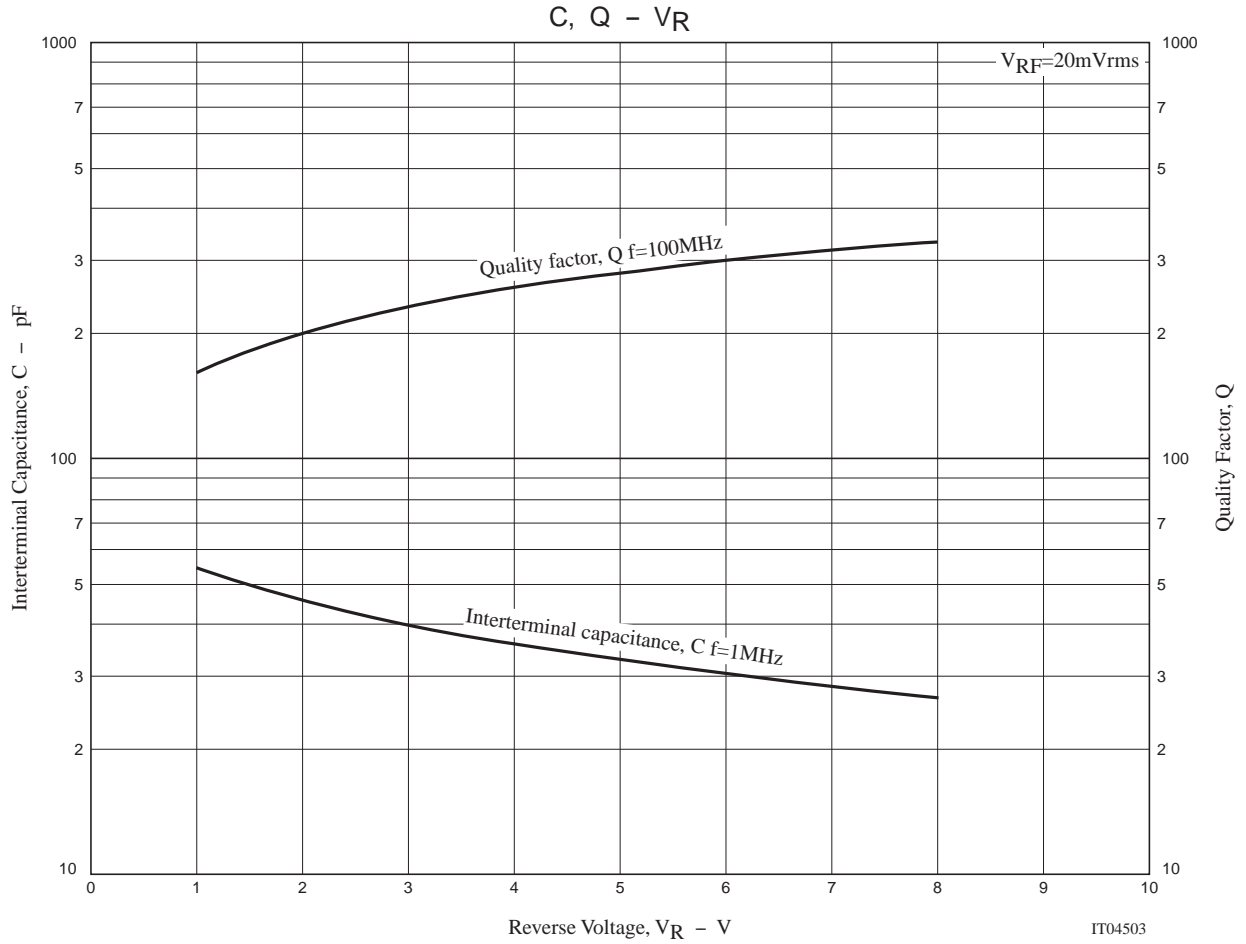
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Breakdown Voltage	V(BR)R	I <sub>R</sub> =10μA	16			V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =10V			50	nA
Interterminal Capacitance	*1 C2V	V <sub>R</sub> =2.0V, f=1MHz	44.0		46.5	pF
	C8V	V <sub>R</sub> =8.0V, f=1MHz	25.1		28.2	pF
Quality 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 ΔC <sub>m</sub>	V <sub>R</sub> =2.0V, f=1MHz, (C <sub>max</sub> -C <sub>min</sub> ) / C <sub>min</sub> ×100			3	%

Note) \*1 : Capacitance value of one diode

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

Marking : ZA

# SVC230



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