



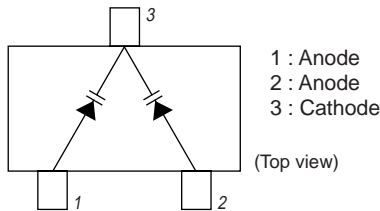
# SVC236

## Varactor Diode for FM Receiver Electronic Tuning Use

### Features

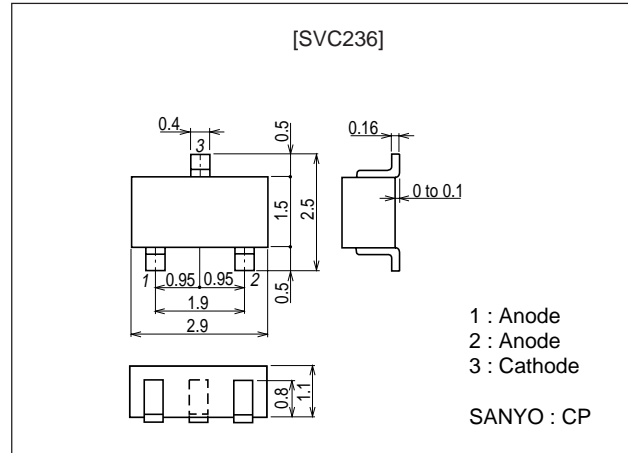
- Low voltage (6.5V).
- Twin type varactor diode with good large-signal characteristics for FM receiver electronic tuning use.
- Very small package permits SVC236-applied sets to be compact and slim.
- Can be also provided in tape reel package and automatic insertion is supported.
- High capacitance ratio ( $V_R=1.0$  to 6.5V).

### Electrical Connection



### Package Dimensions

unit : mm  
1169A



### Specifications

#### Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| Parameter            | Symbol    | Conditions | Ratings     | Unit             |
|----------------------|-----------|------------|-------------|------------------|
| Reverse Voltage      | $V_R$     |            | 16          | V                |
| Junction Temperature | $T_J$     |            | 125         | $^\circ\text{C}$ |
| Storage Temperature  | $T_{stg}$ |            | -55 to +125 | $^\circ\text{C}$ |

#### Electrical Characteristics at $T_a=25^\circ\text{C}$

| Parameter                  | Symbol       | Conditions  | Ratings |     |        | Unit |
|----------------------------|--------------|---|---------|-----|--------|------|
|                            |              |   | min     | typ | max    |      |
| Breakdown Voltage          | $V_{(BR)R}$  | $I_R=10\mu\text{A}$   | 16      |     |        | V    |
| Reverse Voltage            | $I_R$        | $V_R=10\text{V}$  |         |     | 50     | nA   |
| Interterminal Capacitance* | C1V          | $V_R=1.0\text{V}, f=1\text{MHz}^*$  | 92.07   |     | 102.12 | pF   |
|                            | C3.0V        | $V_R=3.0\text{V}, f=1\text{MHz}$  | 35.14   |     | 41.98  | pF   |
|                            | C6.5V        | $V_R=6.5\text{V}, f=1\text{MHz}$  | 14.44   |     | 16.84  | pF   |
| Quality Factor             | Q            | $V_R=3.0\text{V}, f=100\text{MHz}$  | 70      |     |        |      |
| Capacitance Ratio          | CR           | C1.0V / C6.5V   | 5.0     |     |        |      |
| Matching Tolerance         | $\Delta C_m$ | $V_R=1.0\text{V}, 3.0, 6.5, f=1\text{MHz} (C_{max}-C_{min}) / C_{min} \times 100$ |         |     | 3.0    | %    |

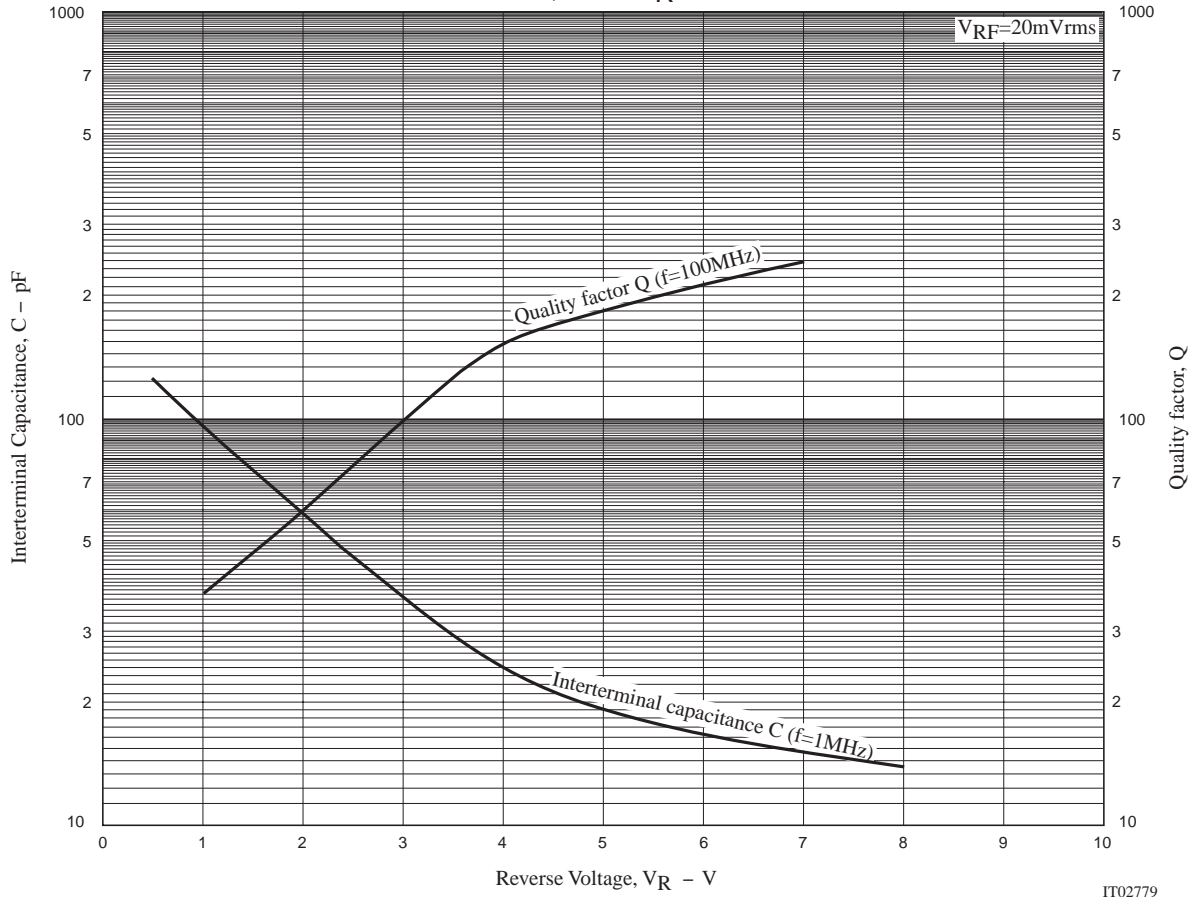
Note)\* : Capacitance value per each diode. \* : 1MHz signal : 20mVrms

Marking : ZV

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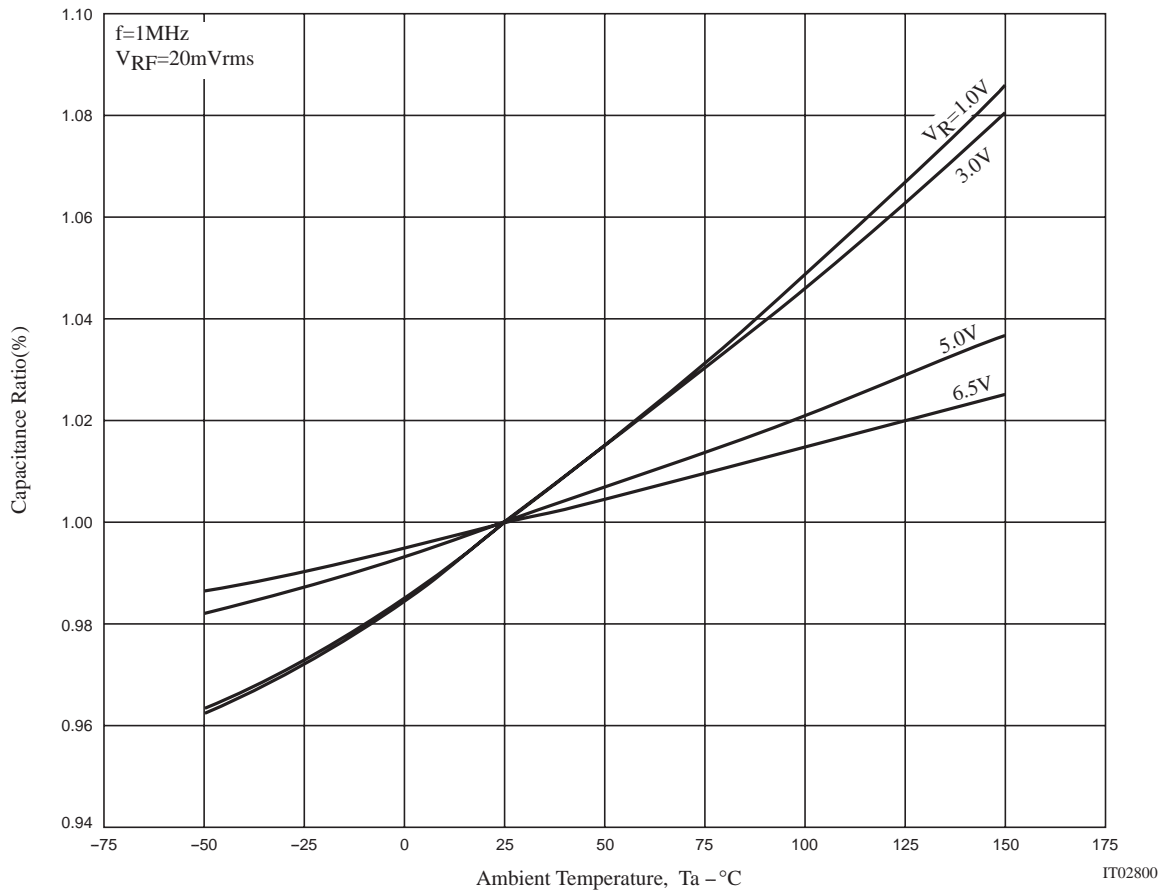
SVC236

C, Q - V<sub>R</sub>



IT02779

C - T<sub>a</sub>



IT02800

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