



# SVC233

## Varactor Diode for FM Band Pager

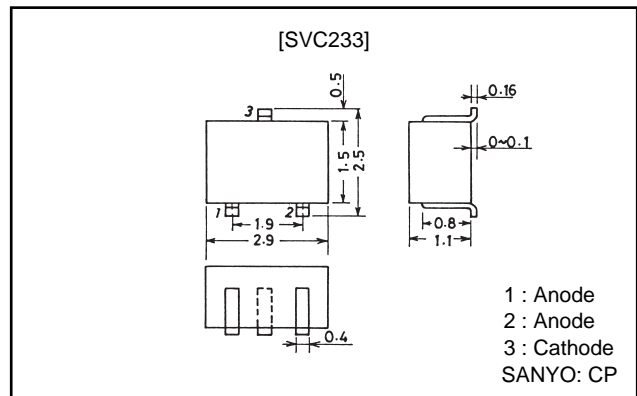
### Features

- Low Voltage (4.5V).
- Twin type varactor diode device for FM band pagers because of excellent large-signal input characteristics.
- Small-size package (CP) permitting SVC233-applied sets to be compact and slim.
- Possible to offer the SVC233 devices in a tape reel packaging, which facilitates automatic insertion.

### Package Dimensions

unit: mm

#### 1169A-CP



### Specifications

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

| Parameter            | Symbol    | Conditions | Ratings     | Unit |
|----------------------|-----------|------------|-------------|------|
| Reverse Voltage      | $V_R$     |            | 16          | V    |
| Junction Temperature | $T_j$     |            | 125         | °C   |
| Storage temperature  | $T_{stg}$ |            | -55 to +125 | °C   |

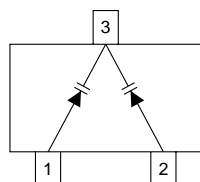
#### Electrical Characteristics at Ta=25°C

| Parameter                   | Symbol       | Conditions                                                        | Ratings |     |       | Unit |
|-----------------------------|--------------|-------------------------------------------------------------------|---------|-----|-------|------|
|                             |              |                                                                   | min     | typ | max   |      |
| Breakdown Voltage           | $V_{(BR)R}$  | $I_R=10\mu A$                                                     | 16      |     |       | V    |
| Reverse Current             | $I_R$        | $V_R=10V$                                                         |         |     | 50    | nA   |
| Interterminal Capacitance * | $C_{1V}$     | $V_R=1.0V, f=1MHz$                                                | 62.02   |     | 68.79 | pF   |
|                             | $C_{3.0V}$   | $V_R=3.0V, f=1MHz$                                                | 33.45   |     | 41.98 | pF   |
|                             | $C_{4.5V}$   | $V_R=4.5V, f=1MHz$                                                | 21.45   |     | 28.27 | pF   |
| Quality Factor              | Q            | $V_R=3.0V, f=100MHz$                                              | 60      |     |       |      |
| Capacitance Ratio           | CR           | $C_{1.0V} / C_{4.5V}$                                             | 2.35    |     | 3.00  |      |
| Matching Tolerance          | $\Delta C_m$ | $V_R=1.0, 3.0, 4.5V, f=1MHz$<br>( $C_{max} - C_{min} / C_{min}$ ) |         |     | 0.03  |      |

Note ) \* : Capacitance value of one diode

Marking : SV

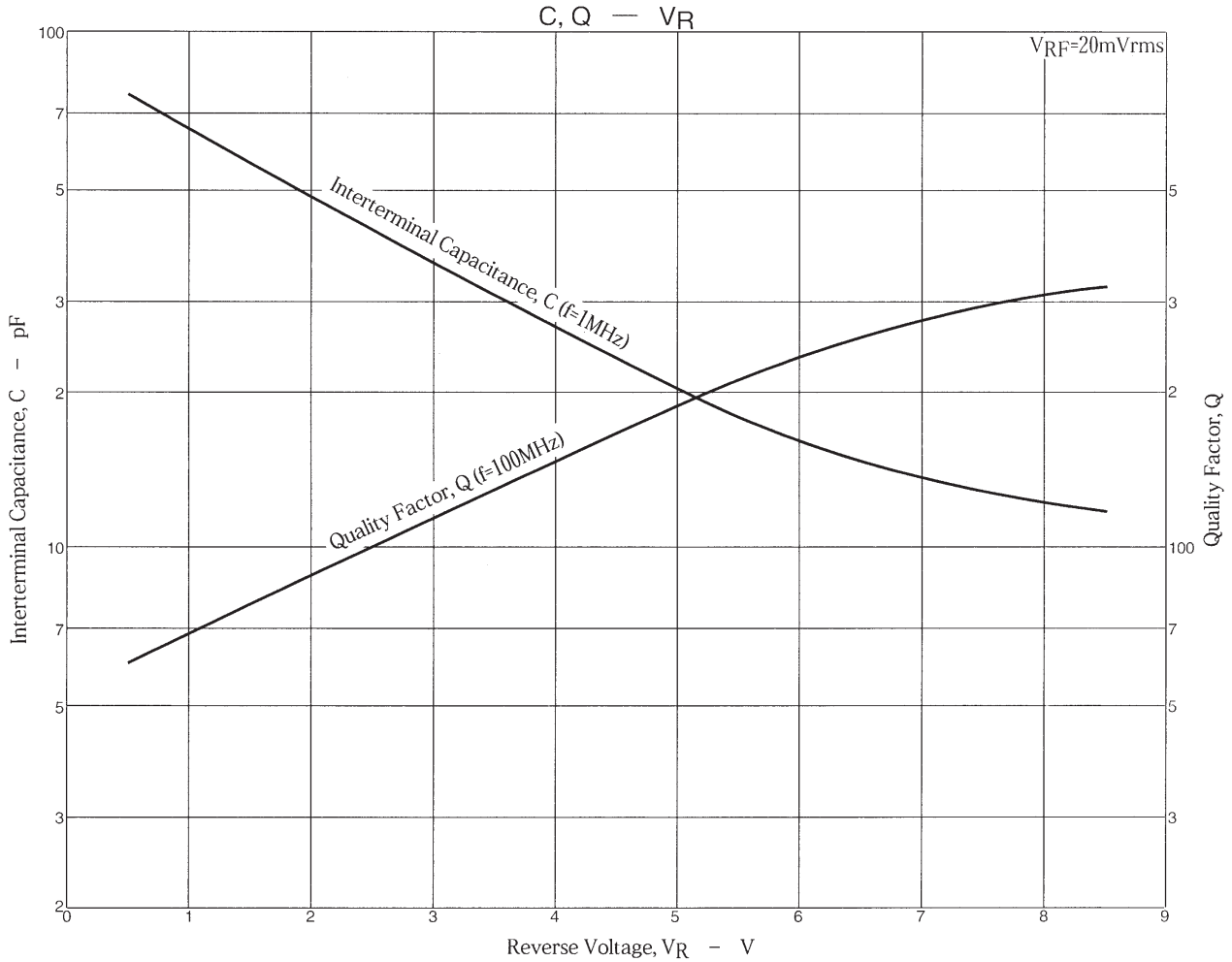
### Electrical Connection



1 : Anode  
2 : Anode  
3 : Cathode

A06245

## SVC233



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