

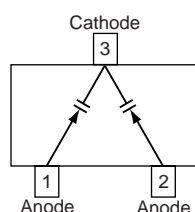
**SVC234**

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 SVC234-applied sets to be compact and slim.
- Since available also in tape reel package, automatic insertion is supported.

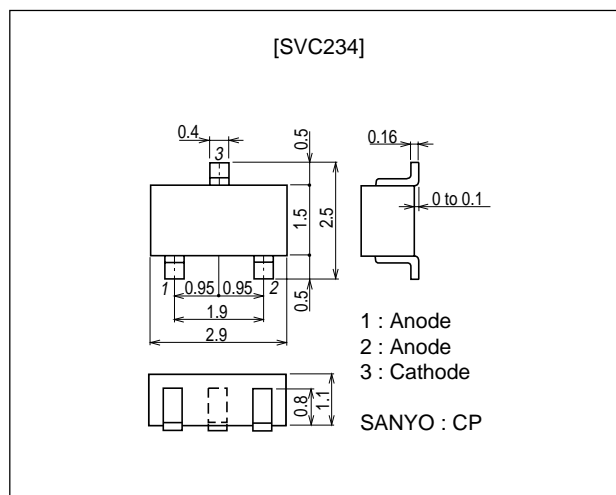
Electrical Connection



Package Dimensions

unit : mm

1169A



Specifications

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

| 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 $T_c=25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | | Unit |
|-----------------------------|--------------|-----------------------------------------------------------------------------------------------|---------|-------|------|
| | | | min | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R=10\mu\text{A}$ | 16 | | V |
| Reverse Voltage | V_R | $V_R=10\text{V}$ | | 50 | nA |
| Interterminal Capacitance * | C_{1V} | $V_R=1.0\text{V}, f=1\text{MHz}$ | 62.02 | 68.79 | pF |
| | $C_{4.5V}$ | $V_R=4.5\text{V}, f=1\text{MHz}$ | 21.45 | 28.27 | pF |
| | $C_{6.5V}$ | $V_R=6.5\text{V}, f=1\text{MHz}$ | 13.42 | 16.03 | pF |
| Quality Factor | Q | $V_R=3.0\text{V}, f=100\text{MHz}$ | 60 | | |
| Capacitance Ratio | C_R | $C_{1.0V} / C_{6.5V}$ | 4.05 | 4.90 | |
| Matching Tolerance | ΔC_m | $V_R=1.0, 4.5, 6.5\text{V}, f=1\text{MHz} (C_{\text{max}} - C_{\text{min}}) / C_{\text{min}}$ | | 0.03 | |

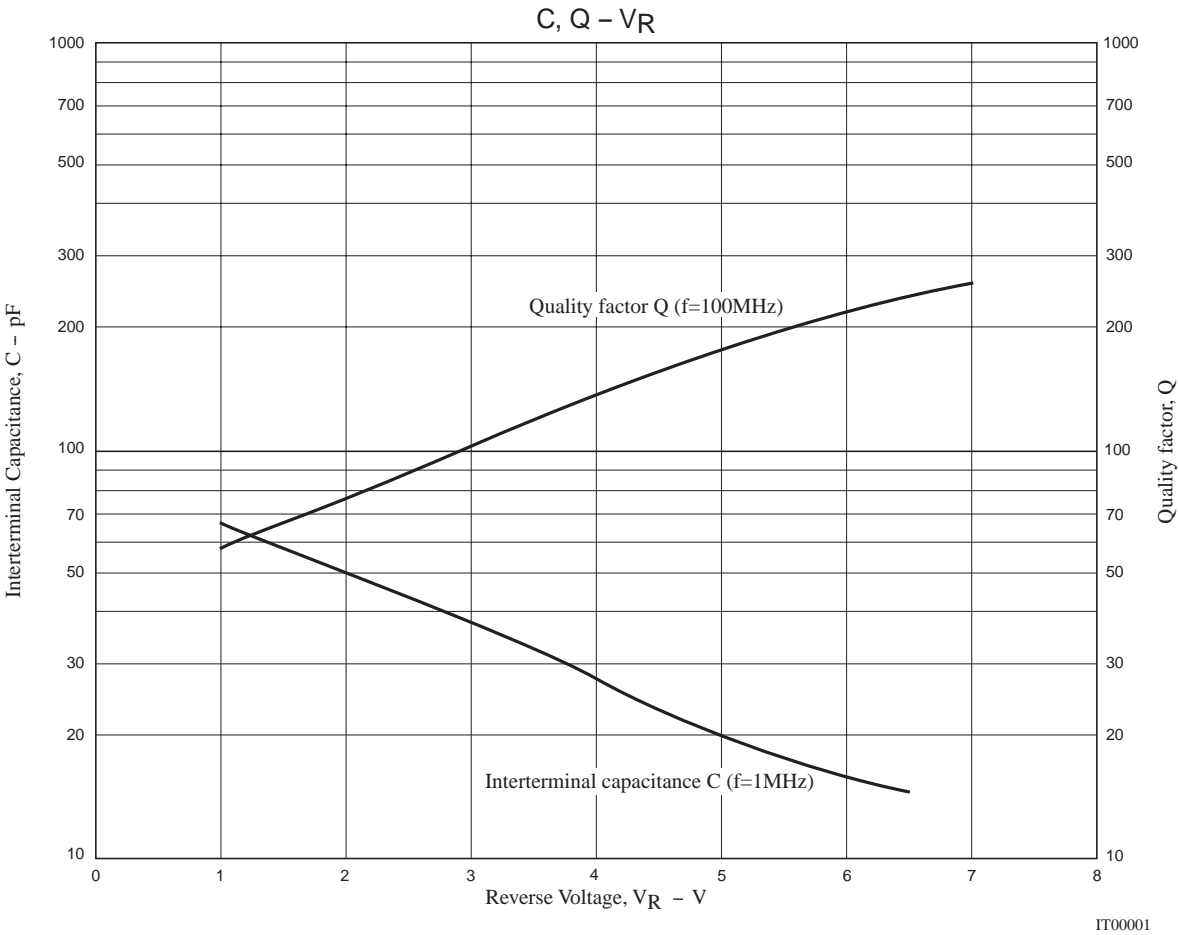
★ : Capacitance value per each diode.

Marking : SV

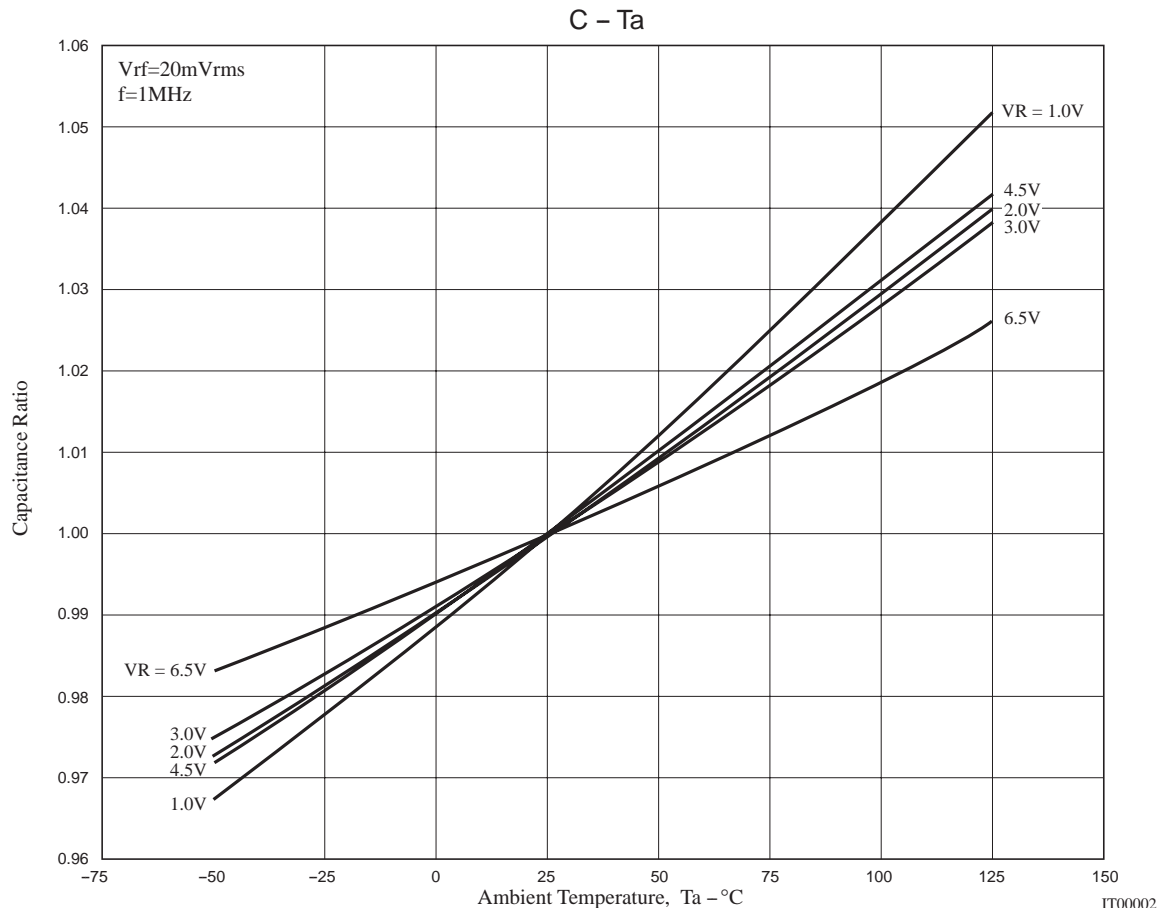
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Address and Capacitance Value [pF]

| Address | C1.0V | Address | C3.0V | Address | C4.5V | Address | C6.5V |
|---------|----------------|---------|----------------|---------|----------------|---------|----------------|
| 84 | 62.02 to 63.88 | 59 | 33.45 to 34.45 | 41 | 21.45 to 22.09 | 22 | 13.42 to 13.82 |
| 85 | 63.56 to 65.48 | 60 | 34.28 to 35.32 | 42 | 21.98 to 22.64 | 23 | 13.76 to 14.17 |
| 86 | 65.16 to 67.11 | 61 | 35.14 to 36.20 | 43 | 22.53 to 23.21 | 24 | 14.09 to 14.52 |
| 87 | 66.78 to 68.79 | 62 | 36.02 to 37.10 | 44 | 23.09 to 23.78 | 25 | 14.44 to 14.88 |
| — | — | 63 | 36.92 to 38.02 | 45 | 23.67 to 24.38 | 26 | 14.81 to 15.26 |
| — | — | 64 | 37.85 to 38.98 | 46 | 24.27 to 25.00 | 27 | 15.18 to 15.64 |
| — | — | 65 | 38.79 to 39.96 | 47 | 24.87 to 25.61 | 28 | 15.56 to 16.03 |
| — | — | — | — | 48 | 25.50 to 26.26 | — | — |
| — | — | — | — | 49 | 26.13 to 26.92 | — | — |
| — | — | — | — | 50 | 26.78 to 27.59 | — | — |
| — | — | — | — | 51 | 27.45 to 28.27 | — | — |



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