Ordering number:ENN6265

Diffused Junction Type Silicon Composite Varactor

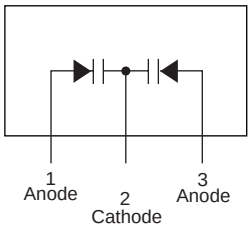
# SVC384

## AM Low Voltage Electronic Tuning Applications

## Features

- Twin type varactor diode for low-voltage AM electronic tuning use.
- Low voltage (6.5V).
- High Q.

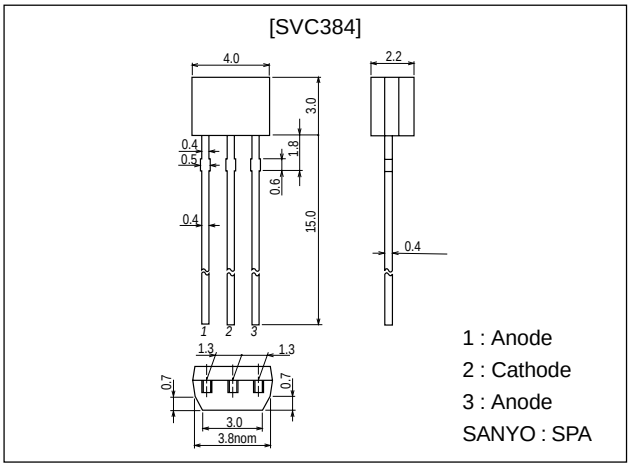
### Electrical Connection




## Package Dimensions

unit:mm

1292




## Specifications

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

| Parameter | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Reverse Voltage | $V_R$ | | 33 | V |
| Junction Temperature | Tj | | 125 | ˚C |
| Storage Temperature | Tstg | | –55 to +125 | ˚C |

### Electrical Characteristics at Ta = 25˚C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---|---|---|---|---|---|---|
| | | | min | typ | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R$=10μA | 33 | | | V |
| Reverse Current | $I_R$ | $V_R$=20V | | | 100 | nA |
| Interterminal Capacitance *1 | $C_{1V}$ | $V_R$=1V, f=1MHz *2 | 482* | | 540* | pF |
| | $C_{4.5V}$ | $V_R$=4.5V, f=1MHz | | 64 | | pF |
| | $C_{6.5V}$ | $V_R$=6.5V, f=1MHz | 21 | | 27 | pF |
| Quality Factor | Q | $V_R$=1V, f=1MHz | 200 | | | |
| Capacitance Ratio | CR | $C_{1V}/C_{6.5V}$ | 17.5 | | 24.5 | |
| Matching Tolerance | ΔCm | (Cmax–Cmin)/Cmin ×100 (Between D1 and D2) $V_R$=1V to 6.5V | | | 2.0 | % |

*1 : The values of interterminal capacitance represent the average of measurements for two elements.
*2 : 1MHz signal : 20mVrms
* : SVC384 are classified by $C_{1V}$ as follows :

| Rank | $C_{1V}$(pF) |
|---|---|
| S | 482 to 515 |
| T | 505 to 540 |

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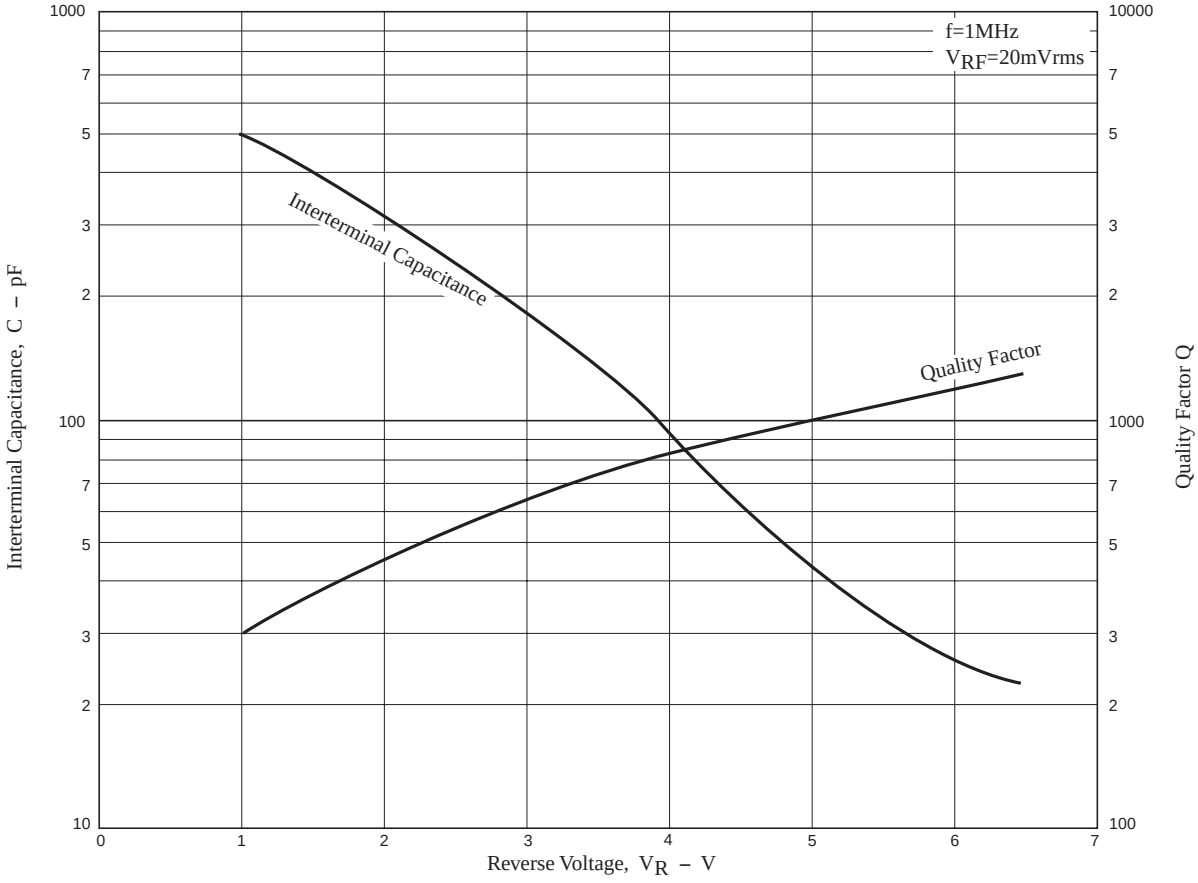
C – $V_R$

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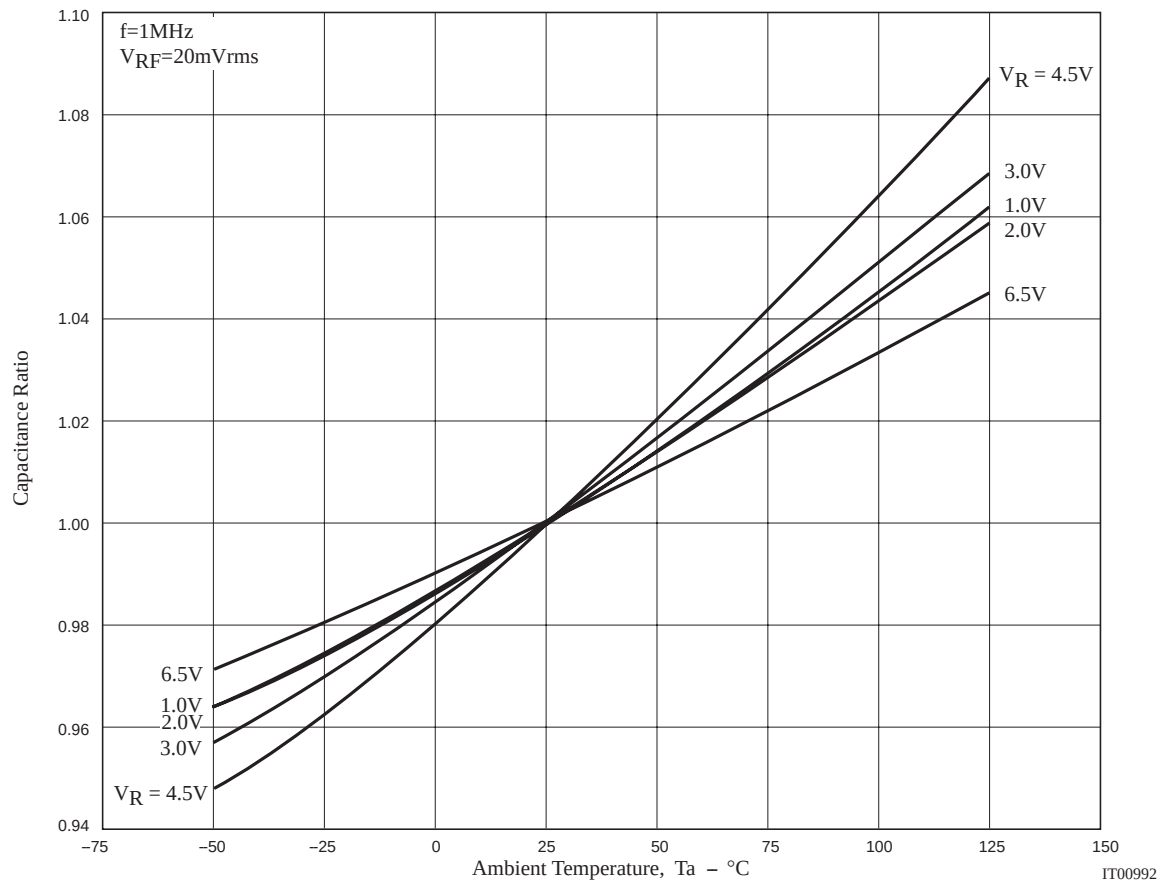
C – Ta

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