SVC

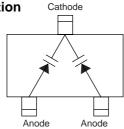


AM Low Voltage Electronic Tuning Applications

Features

- Twin type varactor diode for low-voltage AM electronic tuning use.
- · Low voltage (6.5V).
- · High Q.
- · Possible to offer the SVC383 devices in a tape reel packaging.
- · Surface mount type.
- · Small-sized package, permitting SVC383-applied sets to be compact and slim.

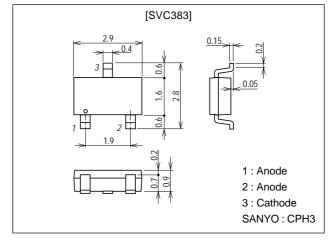
Electrical Connection



Package Dimensions

unit:mm

1293



Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|----------------------|----------------|------------|-------------|------|
| Reverse Voltage | ٧ _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 | | |
|------------------------------|--------------------|---|------|---------|------|------|
| | Symbol | | min | typ | max | Unit |
| 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
- *: SVC383 are classified by C_{1V} as right:

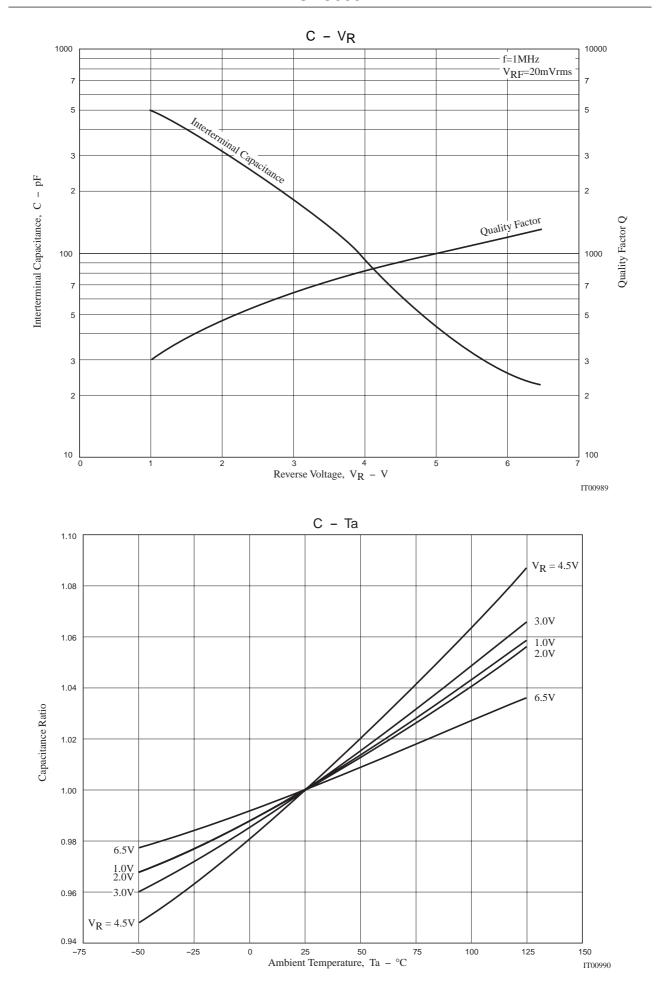
| Rank | C _{1V} (pF) |
|------|----------------------|
| S | 482 to 515 |
| Т | 505 to 540 |

Marking: V3 Capacitance rank: S, T

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