

**SVC252** 

Silicon Diffused Junction Type

# **Varactor Diode for AFC, CB PLL**

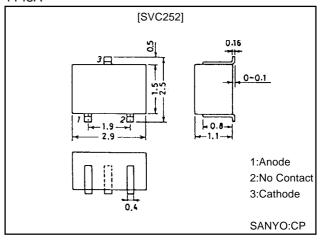
## **Features**

- The SVC252 is a varactor diode designed for use in AFC and CB PLL's VCO.
- · High Q.
- · High capacitance ratio.
- · Compact packaging supports more compact and slimmer SVC252-applied set designs.

# **Package Dimensions**

unit:mm

1148A



## **Specifications**

## Absolute Maximum Ratings at Ta = 25°C

| Parameter            | Symbol  | Conditions | Ratings     | Unit |
|----------------------|---------|------------|-------------|------|
| Reverse Voltage      | $V_{R}$ |            | 16          | V    |
| Junction Temperature | Tj      |            | 125         | °C   |
| Storage Temperature  | Tstg    |            | -55 to +125 | °C   |

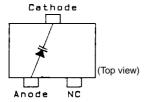
#### Electrical Characteristics at Ta = 25°C

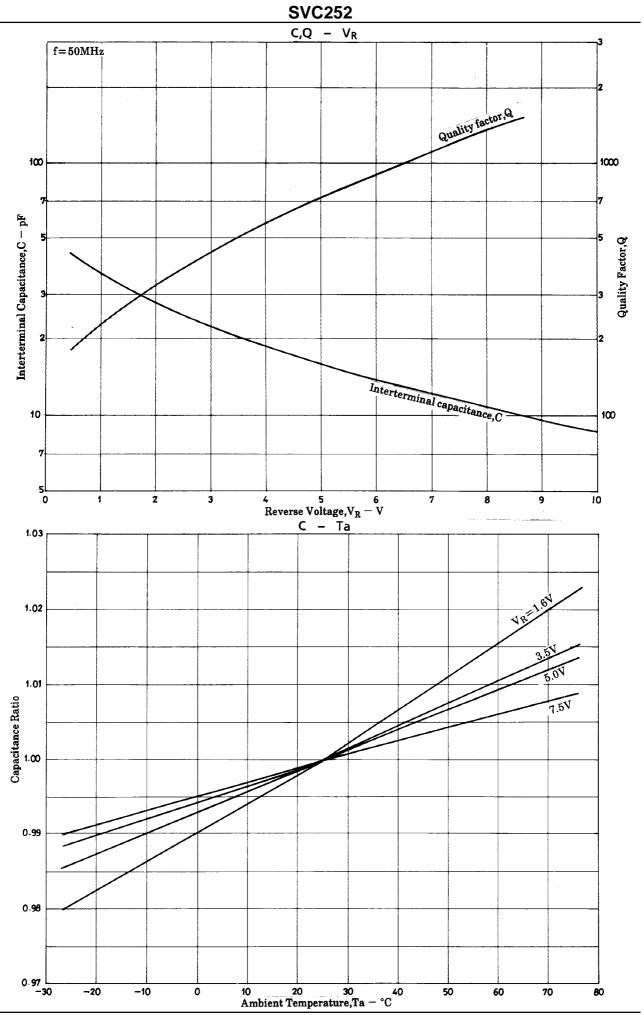
| Parameter                 | Symbol             | Conditions                           | Ratings |     |     | Unit  |
|---------------------------|--------------------|--------------------------------------|---------|-----|-----|-------|
|                           |                    |                                      | min     | typ | max | Offic |
| Breakdown Voltage         | V <sub>(BR)R</sub> | I <sub>R</sub> =10μA                 | 16      |     |     | V     |
| Reverse Current           | I <sub>R</sub>     | V <sub>R</sub> =9V                   |         |     | 10  | nA    |
| Interterminal Capacitance | C <sub>1.6V</sub>  | V <sub>R</sub> =1.6V, f=1MHz*        | 23      | 31  | 38  | pF    |
|                           | C <sub>5.0V</sub>  | V <sub>R</sub> =5.0V, f=1MHz         | 11      | 15  | 19  | pF    |
| Capacitance Ratio         | CR                 | C <sub>1.6V</sub> /C <sub>5.0V</sub> | 1.7     | 2.1 | 4.0 |       |
| Series Resistance         | rs                 | f=50MHz, V <sub>R</sub> =1V          |         |     | 0.6 | Ω     |

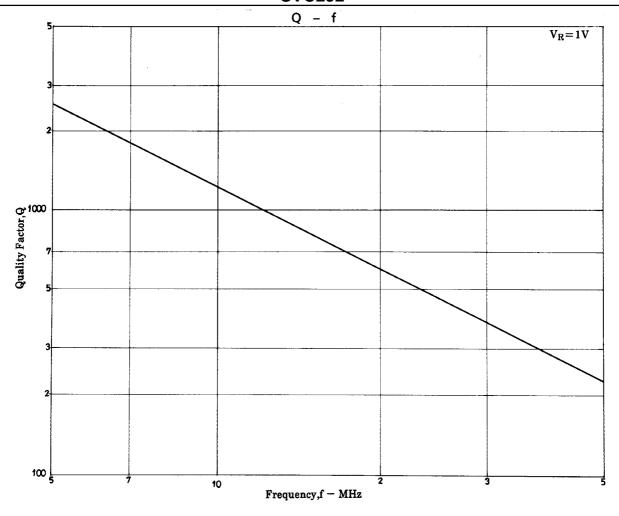
Note)\*:1MHz signal: 20m Vrms

· Marking: HV

#### **Electrical Connection**







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