



SVC251SPA

Diffused Junction Type Silicon Diode

Varactor Diode for AFC, CB PLL

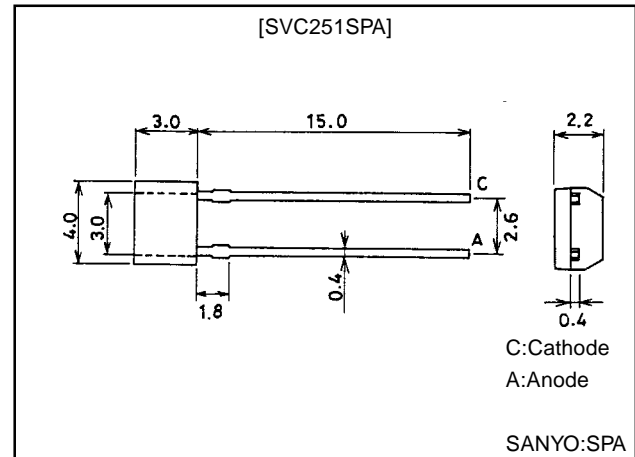
Features

- The SVC251SPA is a varactor diode of hyper abrupt junction structure fabricated with ion implantation technology. It is intended for use in AFC, CB PLL VCO circuitry.
- High Q
- High capacitance ratio

Package Dimensions

unit:mm

1184



Specifications

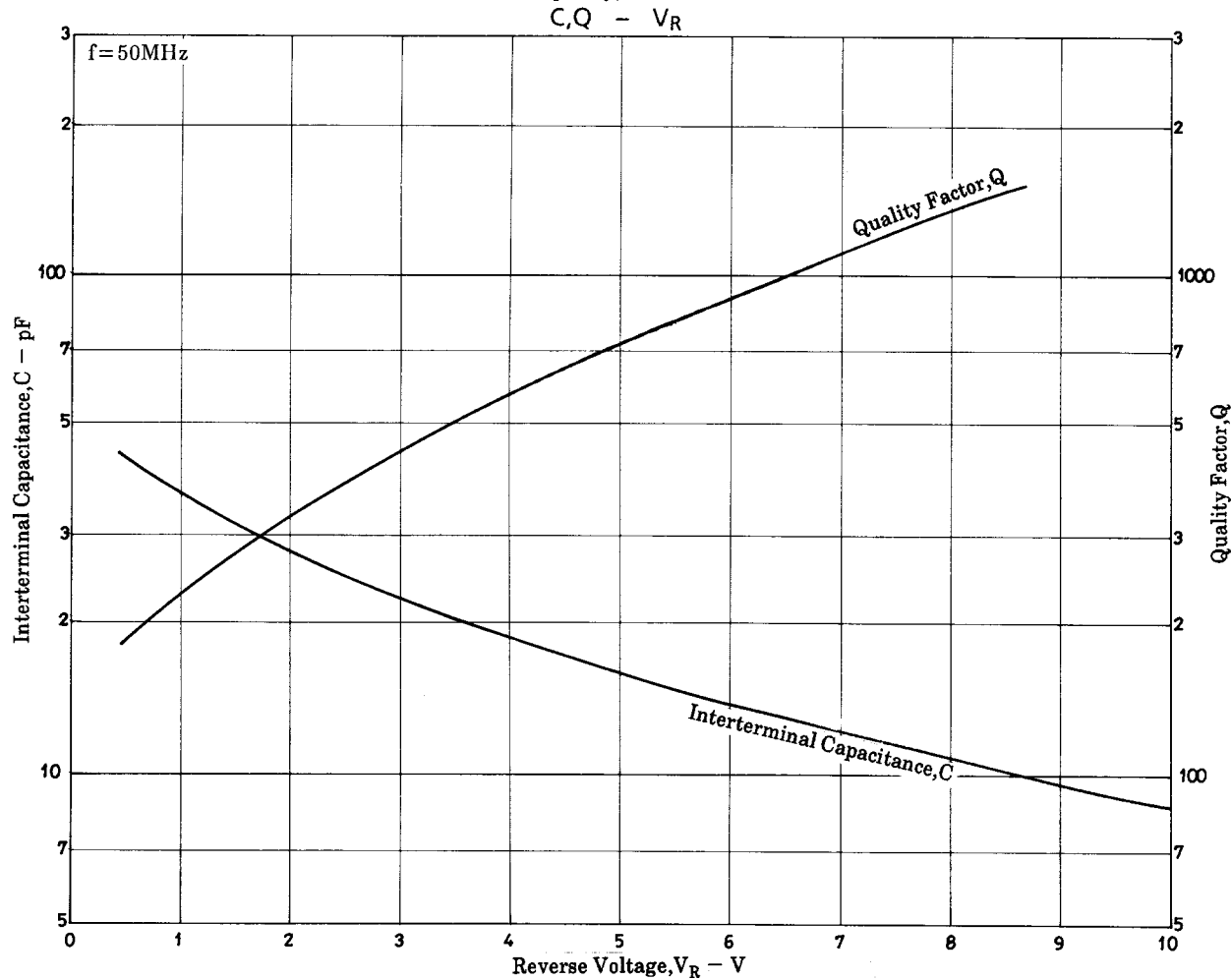
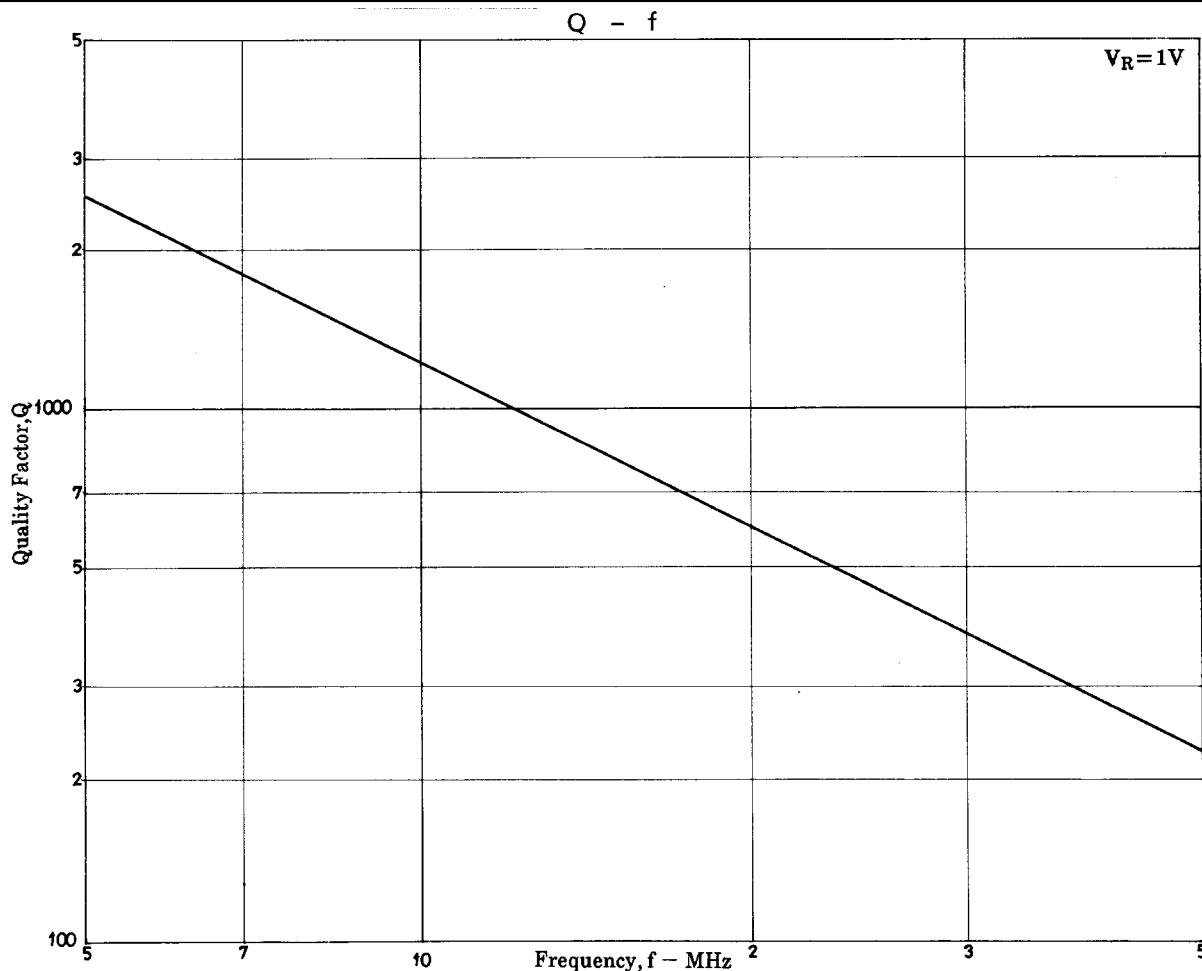
Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|----------------------|-----------|------------|-------------|------|
| Reverse Voltage | V_R | | 12 | V |
| Junction Temperature | T_J | | 100 | °C |
| Storage Temperature | T_{stg} | | -55 to +100 | °C |

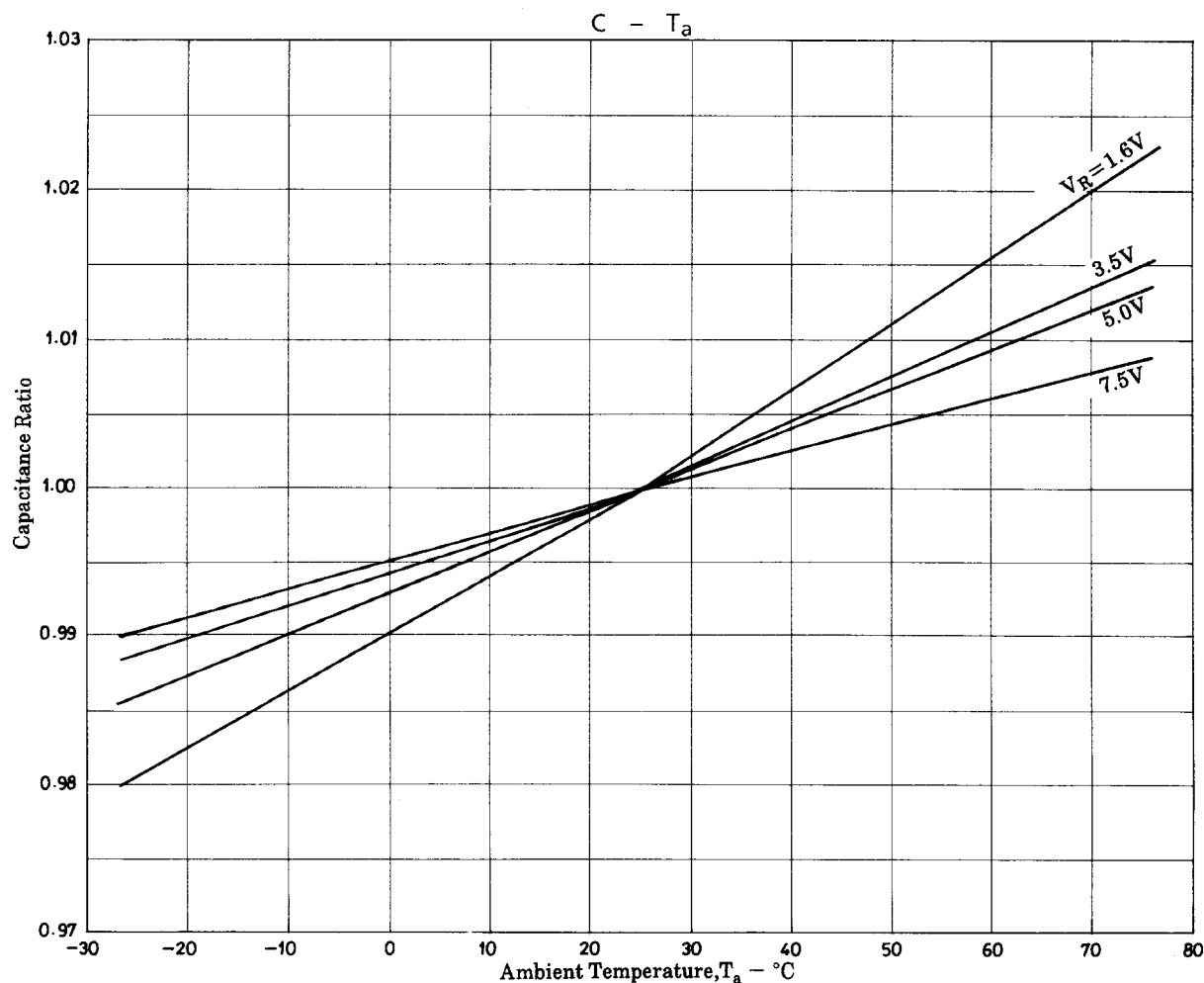
Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|-------------|---------------------|---------|-----|-----|----------|
| | | | min | typ | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R=10\mu A$ | 12 | | | V |
| Reverse Current | I_R | $V_R=9V$ | | | 200 | nA |
| Interterminal Capacitance | $C_{1.6V}$ | $V_R=1.6V, f=1MHz$ | 23 | | 38 | pF |
| | $C_{5.0V}$ | $V_R=5.0V, f=1MHz$ | 11 | | 19 | pF |
| Capacitance Ratio | CR | $C_{1.6V}/C_{5.0V}$ | 1.7 | | | |
| Series Resistance | r_s | $f=50MHz, V_R=1V$ | | | 0.6 | Ω |

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