



SVC211SPA

Diffused Junction Type Silicon Diode
Varactor Diode (IOCAP)

for FM Low-Voltage Electronic Tuning

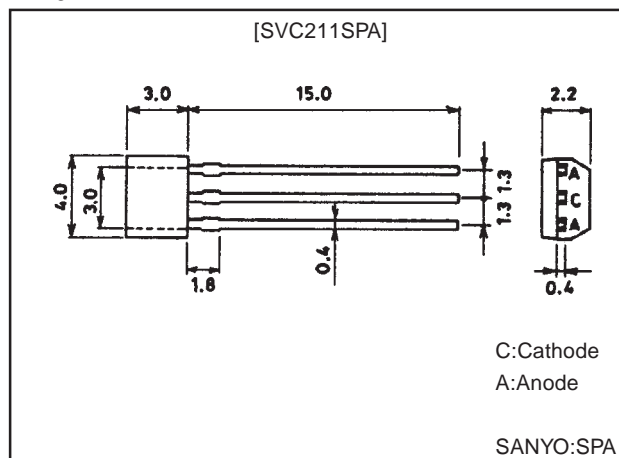
Features

- Twin type varactor diode being excellent in large input characteristic and intended for use in high-voltage FM electronic applications.

Package Dimensions

unit:mm

1129



Specifications

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

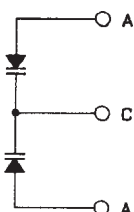
| Parameter | Symbol | Conditions | Ratings | Unit |
|----------------------|-----------|------------|------------|------------------|
| Reverse Voltage | V_R | | -32 | V |
| Junction Temperature | T_j | | 125 | $^\circ\text{C}$ |
| Storage Temperature | T_{stg} | | -55 to 125 | $^\circ\text{C}$ |

Electrical Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|----------------------------|-------------|---|---------|-----|------|------|
| | | | min | typ | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R = -10\mu\text{A}$ | -32 | | | V |
| Reverse Current | I_R | $V_R = -30\text{V}$ | | | -50 | nA |
| Interterminal Capacitance* | $C_{3.0V}$ | $V_R = -3.0\text{V}, f = 1\text{MHz}$ | 37.0 | | 42.0 | pF |
| | C_{25V} | $V_R = -25\text{V}, f = 1\text{MHz}$ | 14.8 | | 18.2 | pF |
| Capacitance Ratio* | CR | $C_{3.0V}/C_{25V}, f = 100\text{MHz}$ | 2.32 | | 2.55 | |
| Quality Factor | Q | $V_R = -3.0\text{V}, f = 100\text{MHz}$ | 100 | | | |

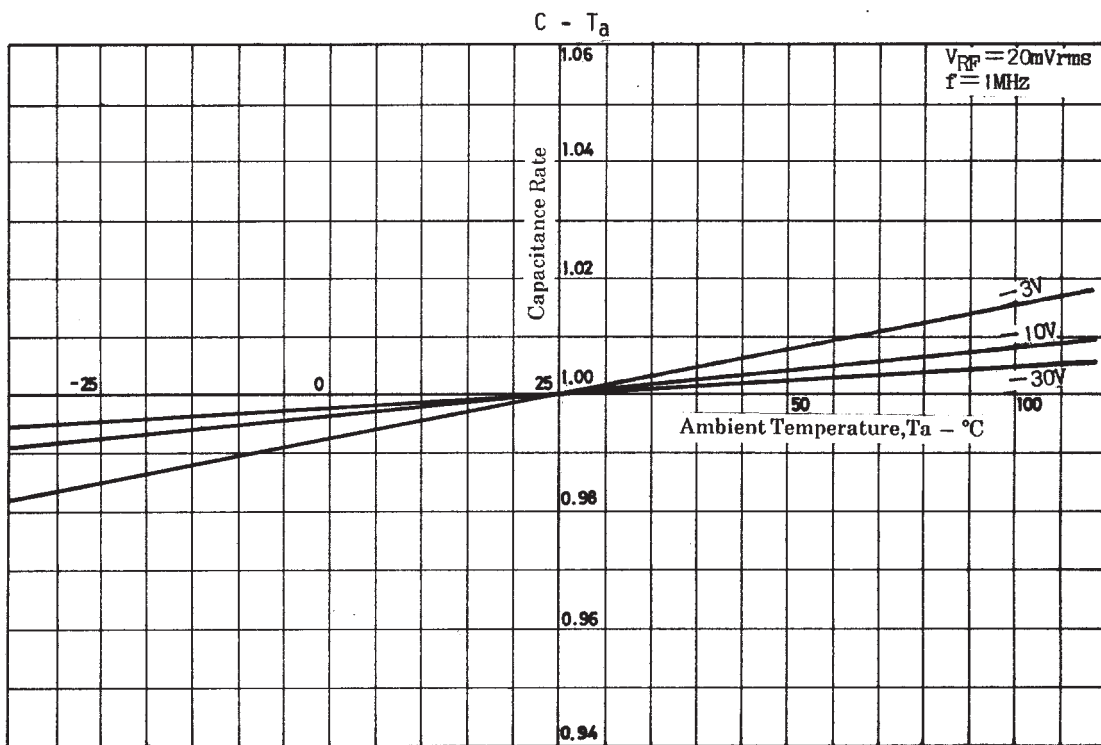
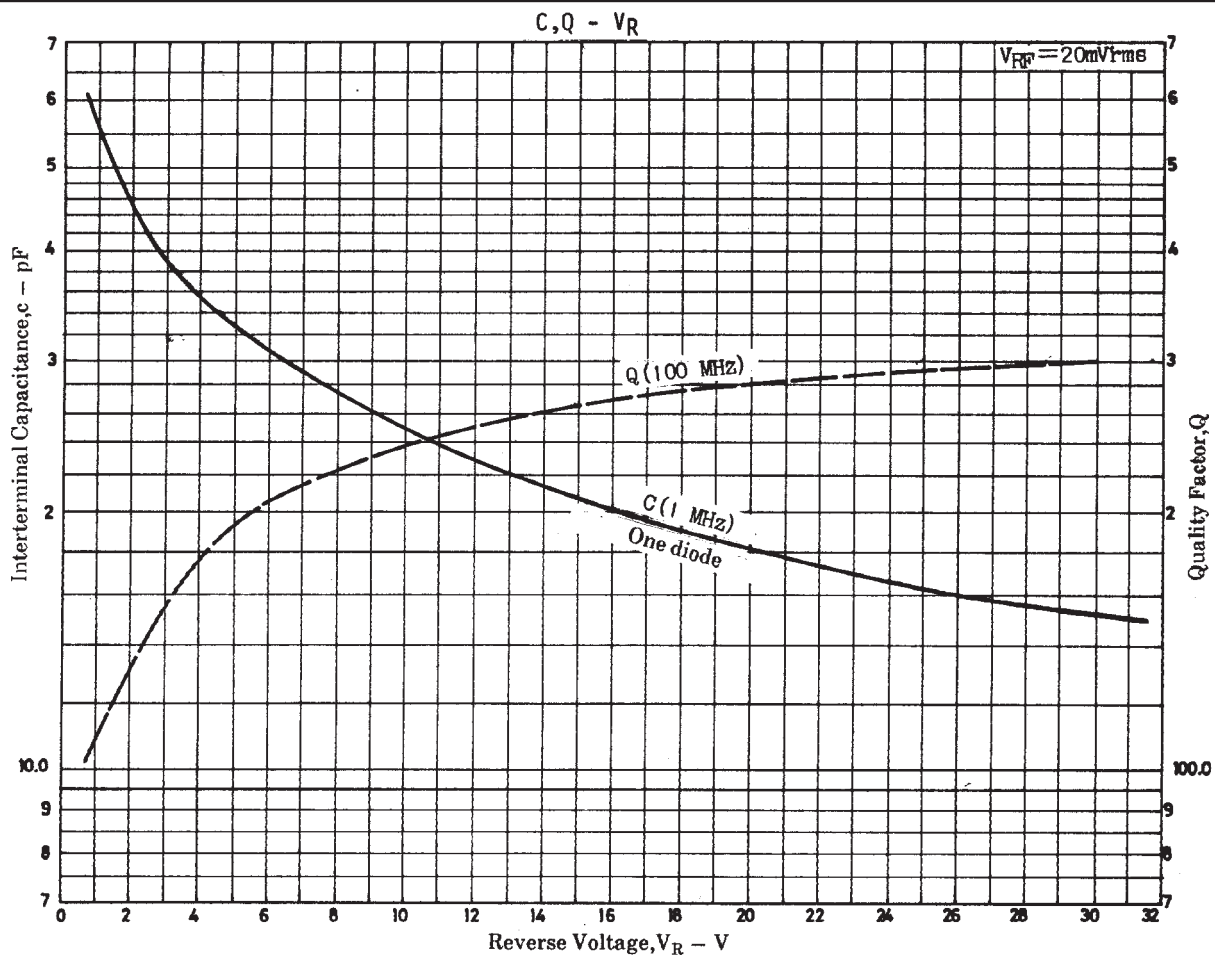
Note)*:Capacitance value of one diode

Electrical Connection



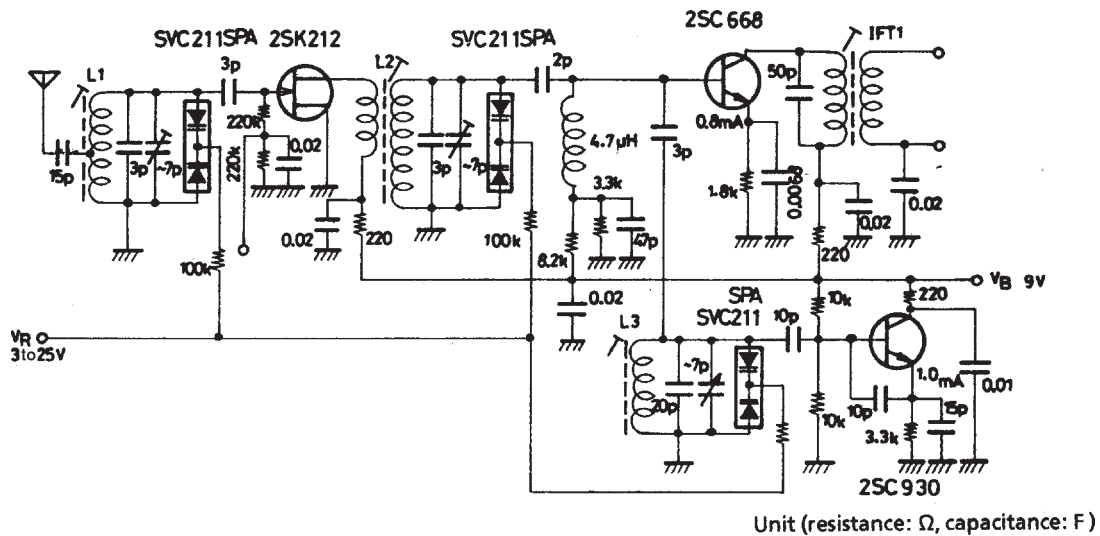
A:Anode
C:Cathode

SVC211SPA



SVC211SPA

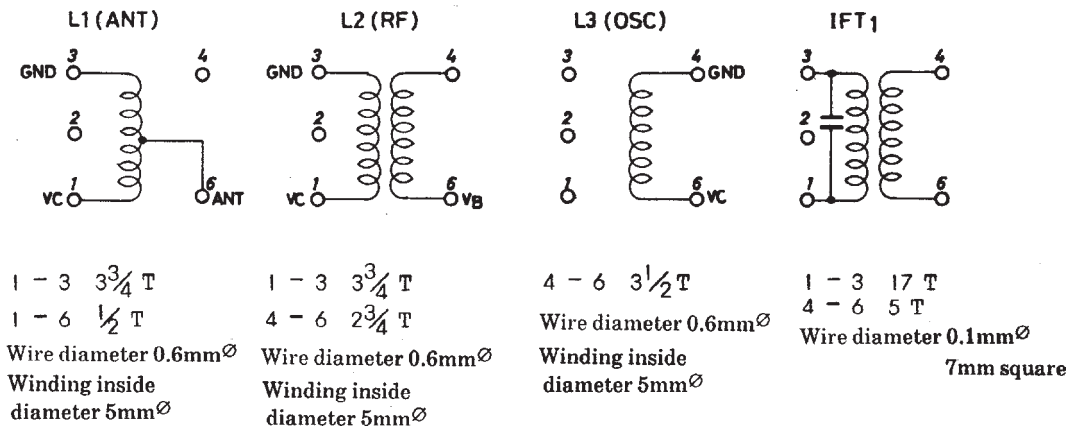
Sample Application Circuit: FM electronic tuner using SVC211SPA



- Main Characteristics

| f | PG | NF | Image interference ratio |
|---------|---------|--------|--------------------------|
| 88 MHz | 31.0 dB | 6.2 dB | 50.0 dB |
| 98 MHz | 31.7 dB | 5.5 dB | 46.7 dB |
| 108 MHz | 31.2 dB | 5.7 dB | 42.0 dB |

- Coil Data



■ No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.

■ Anyone purchasing any products described or contained herein for an above-mentioned use shall:

- ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use.
- ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.

■ Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of March, 1998. Specifications and information herein are subject to change without notice.