

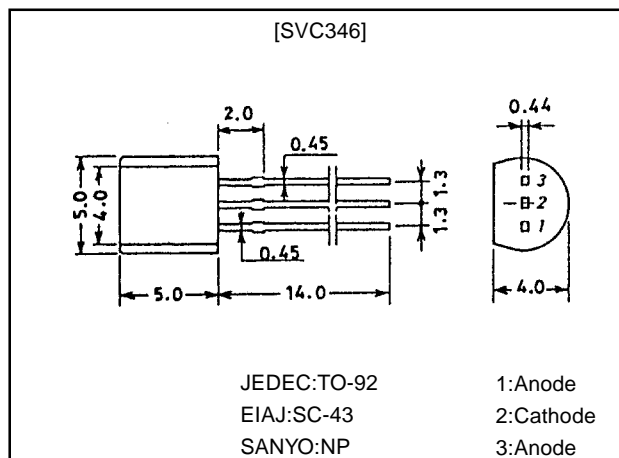
**SVC346**Silicon Diffused Junction Type
Varactor Diode**for AM Low-Voltage Electronic Tuning****Features**

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage($\leq 6.5V$).
- High Q.

Package Dimensions

unit:mm

1271

**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ C$**

| Parameter | Symbol | Conditions | Ratings | Unit |
|----------------------|-----------|------------|-------------|------------|
| Reverse Voltage | V_R | | 33 | V |
| Junction Temperature | T_J | | 125 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +125 | $^\circ C$ |

Electrical Characteristics at $T_a = 25^\circ C$

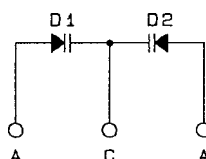
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|-----------------------------|--------------|---|---------|------|--------|------|
| | | | min | typ | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R=10\mu A$ | 33 | | | V |
| Reverse Current | I_R | $V_R=20V$ | | | 100 | nA |
| Interterminal Capacitance*1 | $C_{1.0V}$ | $V_R=1.0V, f=1MHz*2$ | 460.0* | | 540.0* | pF |
| | $C_{4.5V}$ | $V_R=4.5V, f=1MHz$ | | 64.0 | | pF |
| | $C_{6.5V}$ | $V_R=6.5V, f=1MHz$ | 21.0 | | 27.0 | pF |
| Quality Factor | Q | $V_R=1.0V, f=1MHz$ | 200 | | | |
| Capacitance Ratio | CR | $C_{1.0V}/C_{6.5V}$ | 17.5 | | 24.5 | |
| Matching Tolerance | ΔC_m | $(C_{max}-C_{min})/C_{min} \times 100$ (Between D1 to D2) $V_R=1V$ to $6.5V$ | | | 2.0 | % |

Note)*1:The value of interterminal capacitance represent the average of mesurements for tow elements.

Note)*2:1MHz signal:20mVrms

Note)*:The SVC346 are classified by $C_{1.0V}$ as follows:

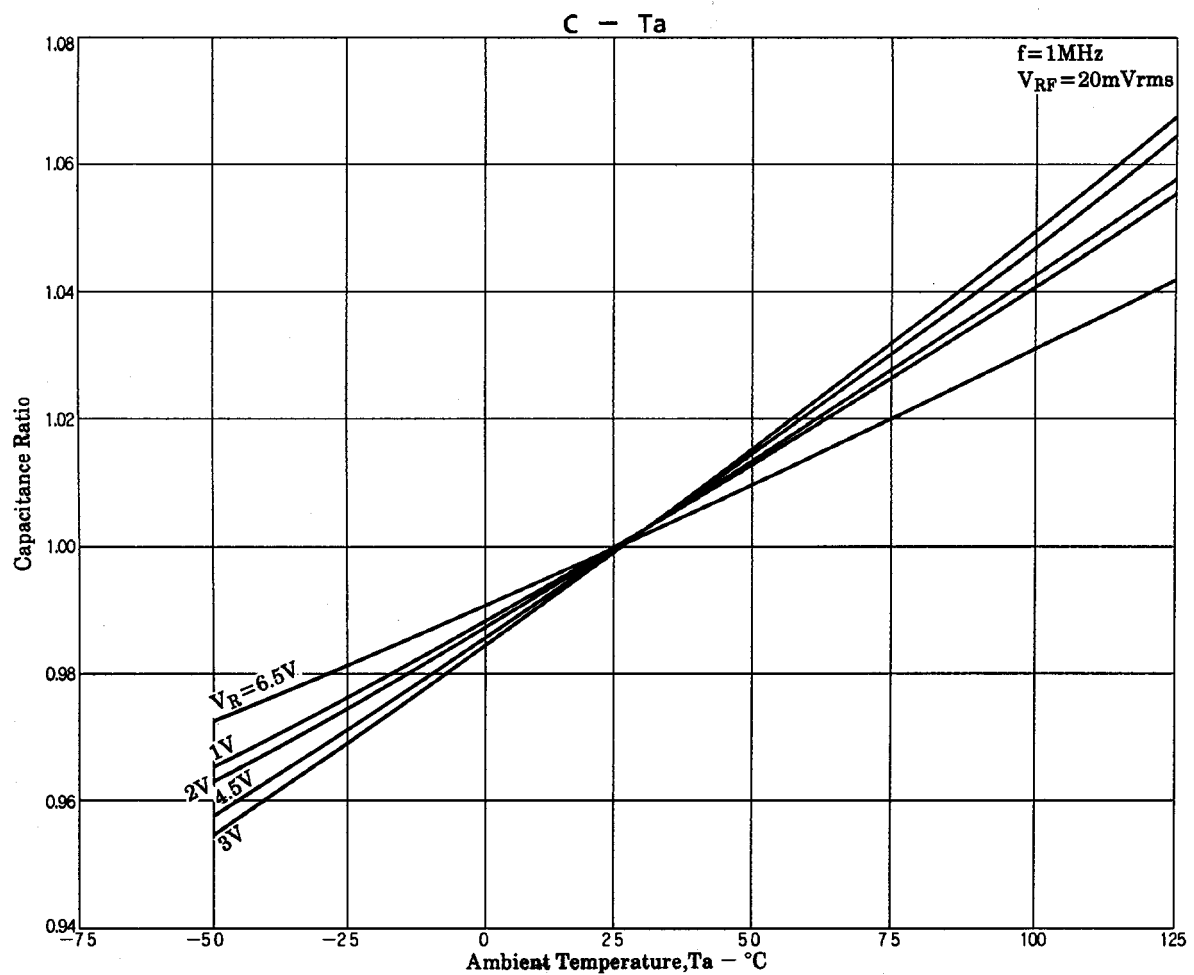
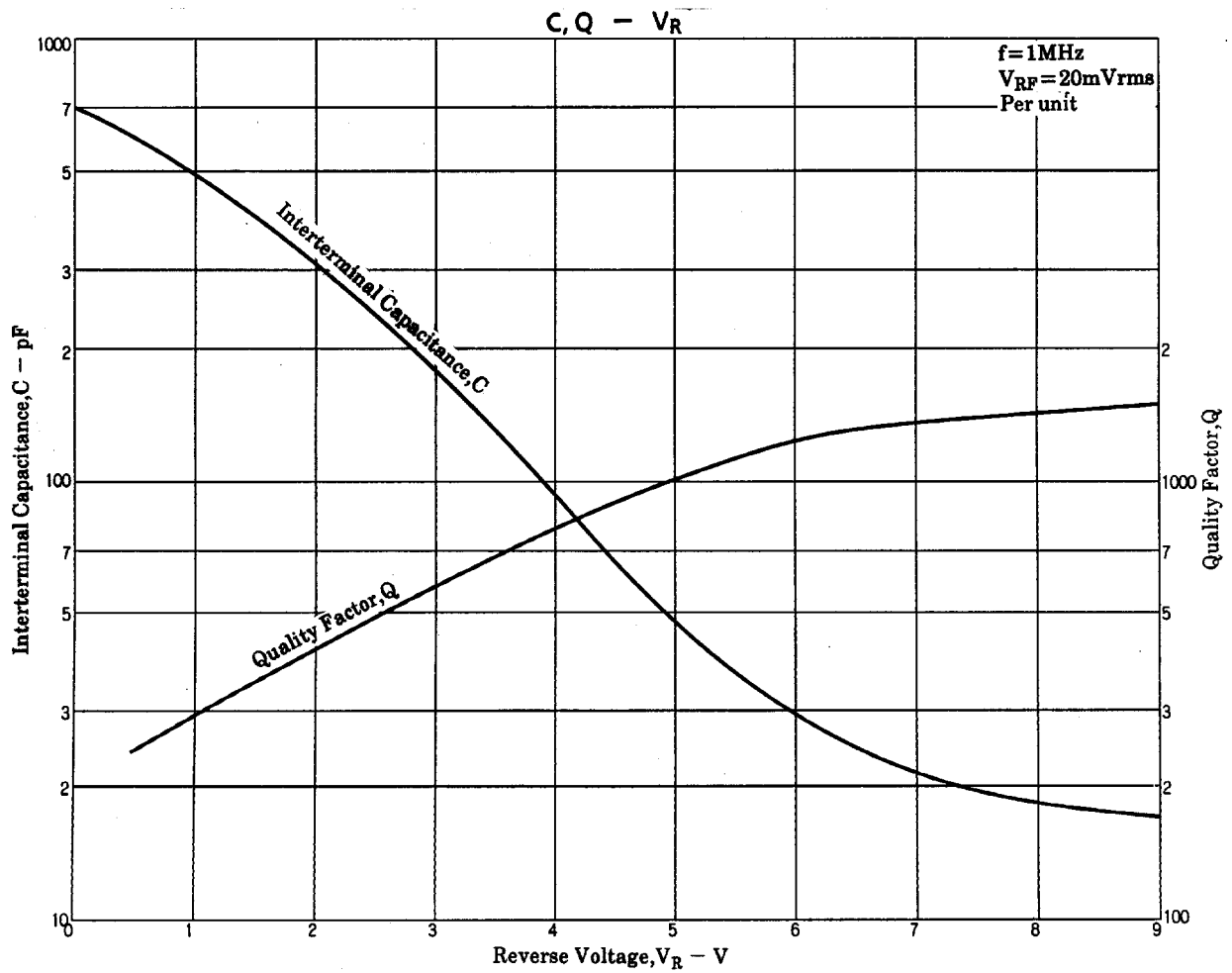
| Rank | $C_{1.0V}(pF)$ |
|------|----------------|
| R | 460.0 to 491.0 |
| S | 482.0 to 515.0 |
| T | 505.0 to 540.0 |

Electrical Connection**SANYO Electric Co.,Ltd. Semiconductor Bussiness Headquarters**

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

33098HA (KT)/D2095GI (KOTO)/AX-9030 No.5347-1/3

SVC346



■ 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.