



SVC344

Silicon Diffused Junction Type
Varactor Diode

for AM Low-Voltage Electronic Tuning

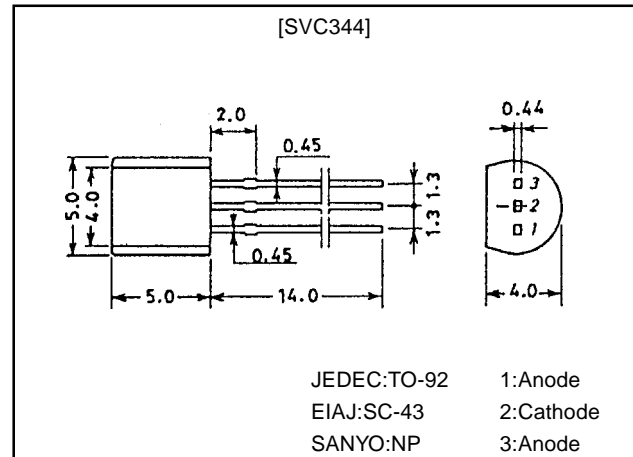
Features

- Twin type varactor diode for low-voltage AM electronic tuning applications.
- Low operating voltage ($\leq 4.5V$).
- 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 | | 30 | V |
| Junction Temperature | T_J | | 125 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +125 | $^\circ C$ |

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

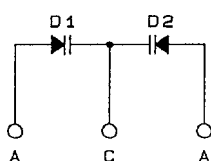
| Parameter | Symbol | Conditions | Ratings | | | Unit |
|-----------------------------|-----------------|-----------------------|---------|-------|-------|------|
| | | | min | typ | max | |
| Breakdown Voltage | $V_{(BR)R}$ | $I_R=10\mu A$ | 30 | | | V |
| Reverse Current | I_R | $V_R=20V$ | | | 100 | nA |
| Interterminal Capacitance*1 | $C_{1.0V}$ | $V_R=1.0V, f=1MHz^*2$ | 410.0 | 430.0 | 445.0 | pF |
| | $C_{3.0V}$ | $V_R=3.0V, f=1MHz$ | 70.0 | 95.0 | 120.0 | pF |
| | $C_{4.5V}$ | $V_R=4.5V, f=1MHz$ | 210.0 | 23.5 | 26.0 | pF |
| Quality Factor | Q | $V_R=1.0V, f=1MHz$ | 200 | | | |
| Capacitance Ratio | CR | $C_{1.0V}/C_{4.5V}$ | 15.0 | | | |
| Matching Tolerance*3 | ΔC_{m1} | $V_R=1.0V, f=1MHz$ | | | 2.0 | % |
| | ΔC_{m2} | $V_R=3.0V, f=1MHz$ | | | 3.0 | % |
| | ΔC_{m3} | $V_R=4.5V, f=1MHz$ | | | 3.0 | % |

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

Note)*2:1MHz signal:20mVrms

Note)*3: $\Delta C_m=(C_{max}-C_{min})/C_{min} \times 100$ Between D1 and D2

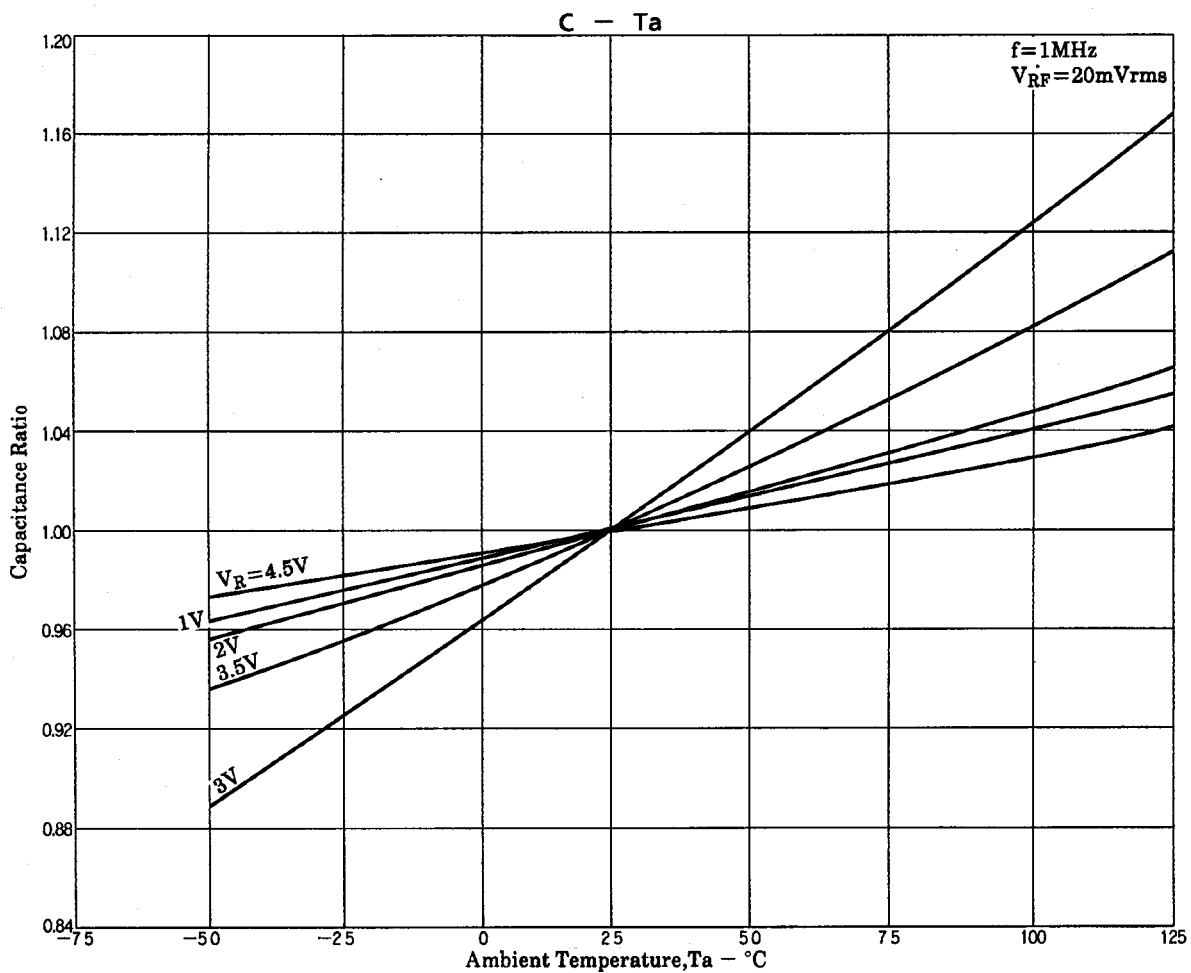
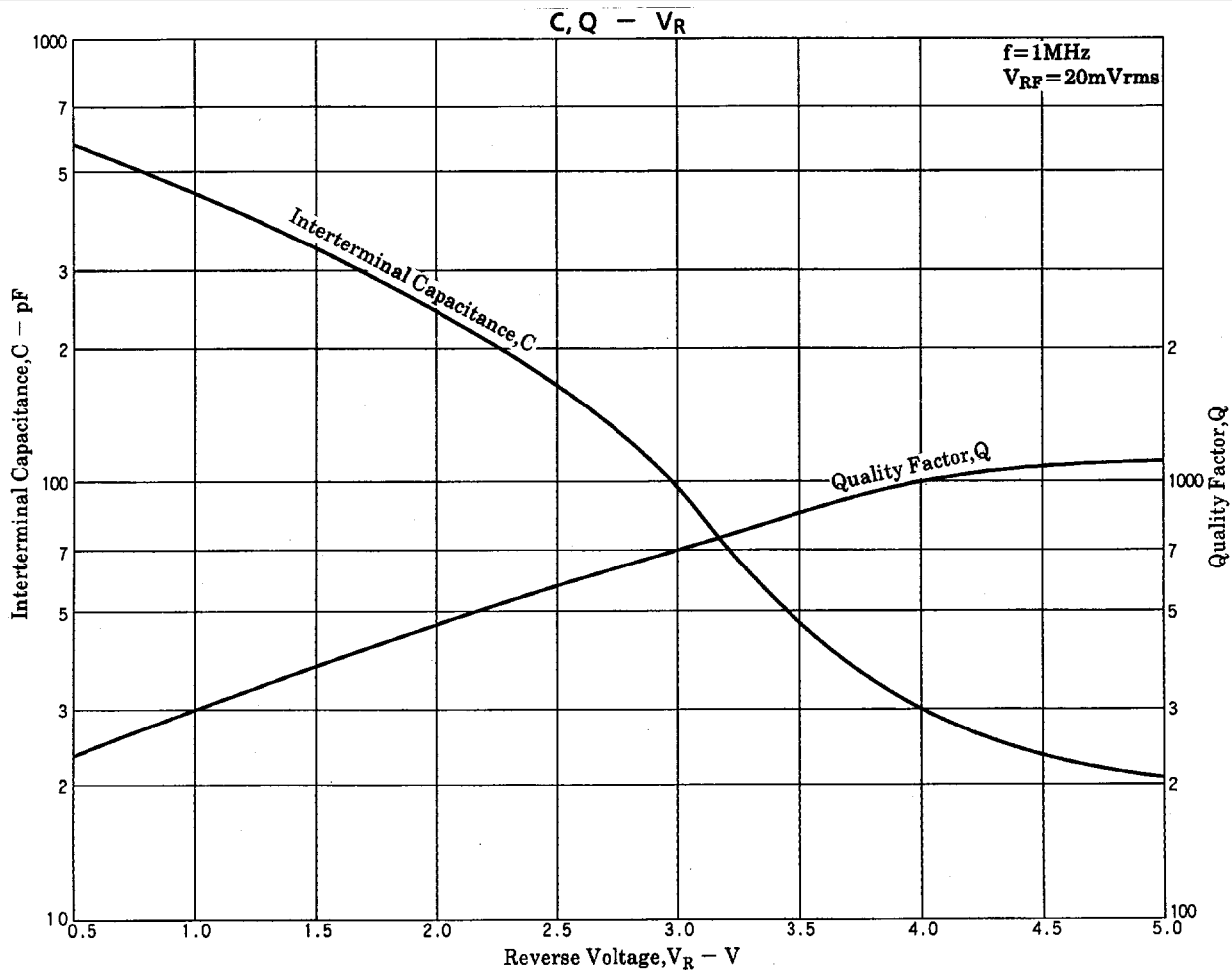
Electrical Connection



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