

SVC346

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

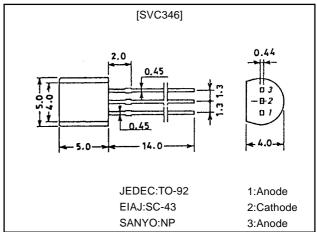
Features

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

Package Dimensions

unit:mm

1271



Specifications

Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | Unit |
|----------------------|---------|------------|-------------|------|
| Reverse Voltage | V_{R} | | 33 | V |
| Junction Temperature | Tj | | 125 | °C |
| Storage Temperature | Tstg | | -55 to +125 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | | Ratings | | |
|-----------------------------|--------------------|--|--------|---------|--------|------|
| | Symbol | | min | typ | max | Unit |
| Breakdown Voltage | V _{(BR)R} | I _R =10μA | 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} ×100 (Between D1 to D2) V _R =1V to 6.5V | | | 2.0 | % |

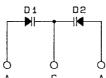
Note)*1:The value of interterminal capacitance represent the average of mesurements for tow elements.

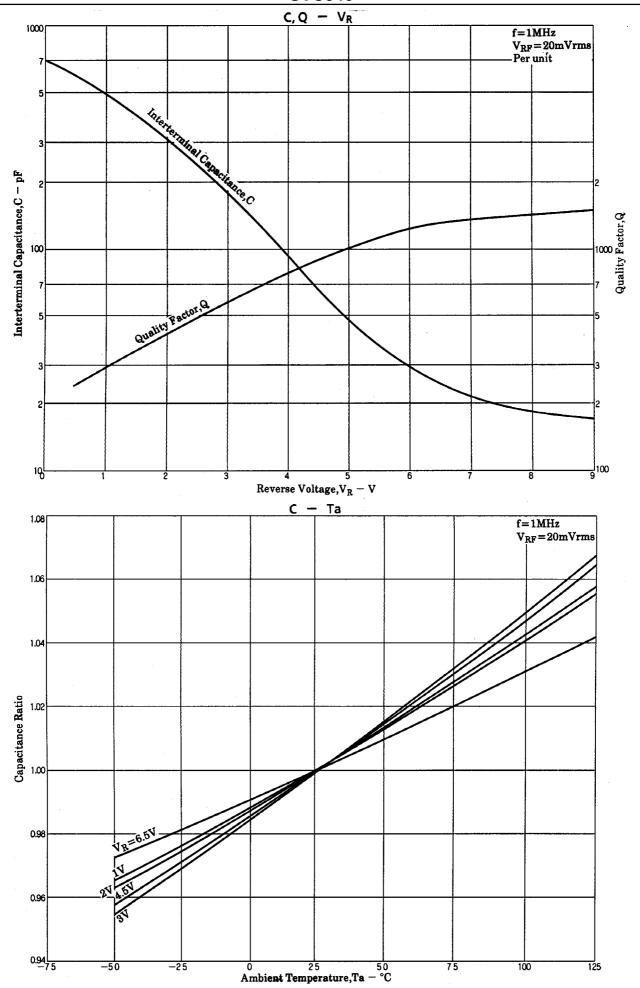
 $Note) *2:1 MHz\ signal:20 mVrms$

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 |
| Т | 505.0 to 540.0 |

Electrical Connection





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