Silicon Diffused-Junction Type

EC2C01C



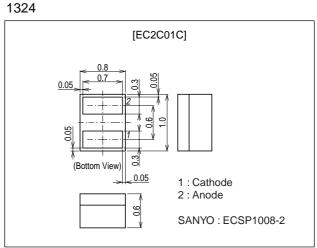
# VCXO & VHF Band VCO Applications Varactor Diode

### Features

- High capacitance ratio. CR(C1.0V / C4.0V)=5.0typ
- Ultrasmall-sized package(1008), slim package (0.6mm), leadless package.

## **Package Dimensions**

unit : mm



# **Specifications**

### Absolute Maximum Ratings at Ta=25°C

| Parameter            | Symbol | Conditions | Ratings     | Unit |
|----------------------|--------|------------|-------------|------|
| Reverse Voltage      | VR     |            | 15          | V    |
| Junction Temperature | Tj     |            | 125         | °C   |
| Storage Temperature  | Tstg   |            | -55 to +125 | °C   |

#### Electrical Characteristics at Ta=25°C

| Parameter                 | Symbol | Conditions                     | Ratings |     |      | Unit |
|---------------------------|--------|--------------------------------|---------|-----|------|------|
|                           |        |                                | min     | typ | max  | Unit |
| Breakdown Voltage         | V(BR)R | I <sub>R</sub> =10μA           | 15      |     |      | V    |
| Reverse Current           | IR     | V <sub>R</sub> =15V            |         |     | 20   | nA   |
| Interterminal Capacitance | C1.0V  | V <sub>R</sub> =1.0V, f=1MHz*  | 18.5    |     | 21.5 | pF   |
|                           | C4.0V  | V <sub>R</sub> =4.0V, f=1MHz   | 3.5     |     | 4.5  | pF   |
| Capacitance Ratio         | CR     | C1.0V/C4.0V                    |         | 5.0 |      |      |
| Series Resistance         | rs     | V <sub>R</sub> =1.0V, f=470MHz |         | 1.4 |      | Ω    |

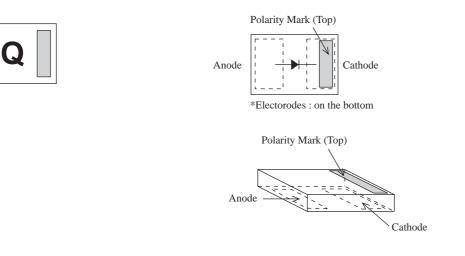
\* : A signal at 1MHz is 20mVrms.

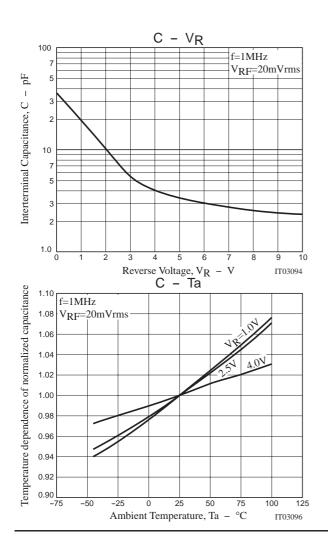
Marking : Q

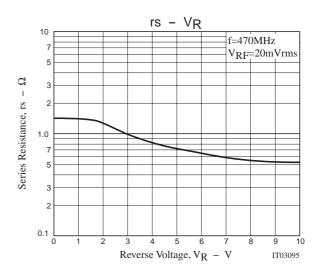
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# Type No. Indication(Top view)







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