TOSHIBA Diode Silicon Epitaxial Planar Type

# 1SV329

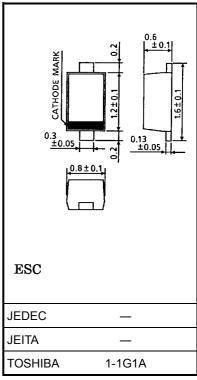
#### VCO for UHF Band Radio

Unit: mm

- High capacitance ratio:  $C_1 \text{ V}/C_4 \text{ V} = 2.8 \text{ (typ.)}$
- Low series resistance:  $r_s = 0.55 \Omega$  (typ.)
- Useful for small size tuner.

## **Maximum Ratings (Ta = 25°C)**

| Characteristics           | Symbol           | Rating         | Unit |
|---------------------------|------------------|----------------|------|
| Reverse voltage           | $V_{R}$          | 10             | V    |
| Junction temperature      | Tj               | 125            | °C   |
| Storage temperature range | T <sub>stg</sub> | <b>−55~125</b> | °C   |



Weight: 0.0014 g (typ.)

## **Electrical Characteristics (Ta = 25°C)**

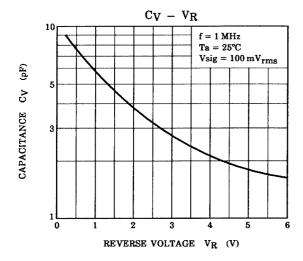
| Characteristics   | Symbol                             | Test Condition                    | Min  | Тур. | Max  | Unit |
|-------------------|------------------------------------|-----------------------------------|------|------|------|------|
| Reverse voltage   | $V_{R}$                            | $I_R = 1 \mu A$                   | 10   | _    | _    | V    |
| Reverse current   | I <sub>R</sub>                     | V <sub>R</sub> = 10 V             | _    | _    | 3    | nA   |
| Capacitance       | C <sub>1 V</sub>                   | V <sub>R</sub> = 1 V, f = 1 MHz   | 5.7  | _    | 6.7  | pF   |
| Capacitance       | C <sub>4 V</sub>                   | V <sub>R</sub> = 4 V, f = 1 MHz   | 1.85 | _    | 2.45 | pF   |
| Capacitance ratio | C <sub>1 V</sub> /C <sub>4 V</sub> | _                                 | 2.7  | 2.8  | _    | _    |
| Series resistance | r <sub>s</sub>                     | V <sub>R</sub> = 1 V, f = 470 MHz | _    | 0.55 | 0.7  | Ω    |

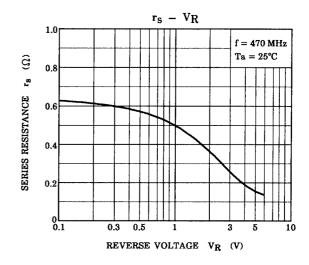
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Note: Signal level when capacitance is measured: Vsig = 100 mVrms

### Marking







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