TOSHIBA Diode Silicon Epitaxial Planar Type

# 1SV310

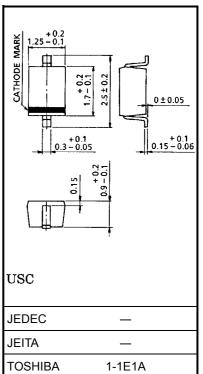
### VCO for UHF Band Radio

TOSHIBA

- High capacitance ratio:  $C_1 V/C_4 V = 2.1$  (typ.)
- Low series resistance:  $r_s = 0.28 \Omega$  (typ.)
- Useful for small size tuner

## Maximum Ratings (Ta = 25°C)

| Characteristics           | Symbol           | Rating  | Unit |
|---------------------------|------------------|---------|------|
| Reverse voltage           | V <sub>R</sub>   | 10      | V    |
| Junction temperature      | Тj               | 125     | °C   |
| Storage temperature range | T <sub>stg</sub> | -55~125 | °C   |



Weight: 0.004 g (typ.)

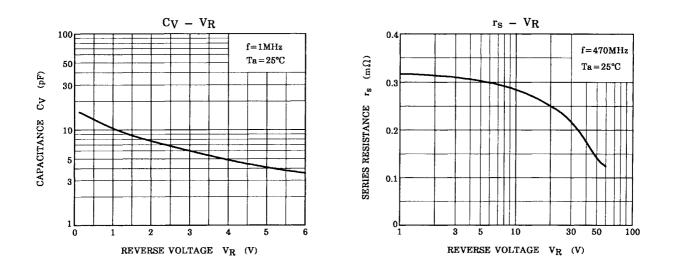
#### **Electrical Characteristics (Ta = 25°C)**

| Characteristics   | Symbol                             | Test Condition                    | Min  | Тур. | Max  | Unit |
|-------------------|------------------------------------|-----------------------------------|------|------|------|------|
| Reverse voltage   | V <sub>R</sub>                     | $I_R = 1 \ \mu A$                 | 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   | 9.7  | _    | 11.1 | pF   |
| Capacitance       | C <sub>4 V</sub>                   | V <sub>R</sub> = 4 V, f = 1 MHz   | 4.45 | _    | 5.45 | pF   |
| Capacitance ratio | C <sub>1 V</sub> /C <sub>4 V</sub> |                                   | 1.8  | 2.1  | _    | _    |
| Series resistance | r <sub>s</sub>                     | V <sub>R</sub> = 1 V, f = 470 MHz | _    | 0.28 | 0.4  | Ω    |

#### Marking



Unit: mm



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