

TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

# 1SV293

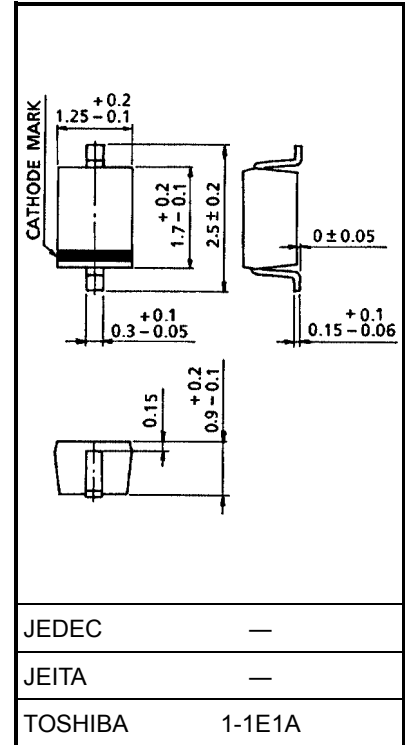
VCO for UHF Band Radio

- Ultra low series resistance:  $r_s = 0.26 \Omega$  (typ.)
- Useful for small size set

### Maximum Ratings (Ta = 25°C)

| Characteristics           | Symbol    | Rating  | Unit |
|---------------------------|-----------|---------|------|
| Reverse voltage           | $V_R$     | 10      | V    |
| Junction temperature      | $T_j$     | 125     | °C   |
| Storage temperature range | $T_{stg}$ | -55~125 | °C   |

Unit: mm



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

Weight: 0.004 g (typ.)

| Characteristics   | Symbol          | Test Condition           | Min  | Typ. | Max  | Unit     |
|-------------------|-----------------|--------------------------|------|------|------|----------|
| Reverse voltage   | $V_R$           | $I_R = 1 \mu A$          | 10   | —    | —    | V        |
| Reverse current   | $I_R$           | $V_R = 10 V$             | —    | —    | 3    | nA       |
| Capacitance       | $C_{1V}$        | $V_R = 1 V, f = 1 MHz$   | 18.0 | —    | 20.0 | pF       |
| Capacitance       | $C_{4V}$        | $V_R = 4 V, f = 1 MHz$   | 10.1 | —    | 11.6 | pF       |
| Capacitance ratio | $C_{1V}/C_{4V}$ | —                        | 1.55 | —    | —    | —        |
| Series resistance | $r_s$           | $V_R = 1 V, f = 470 MHz$ | —    | 0.26 | 0.4  | $\Omega$ |

### Marking



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