

TOSHIBA Diode Silicon Epitaxial Planar Type

JDV2S02E

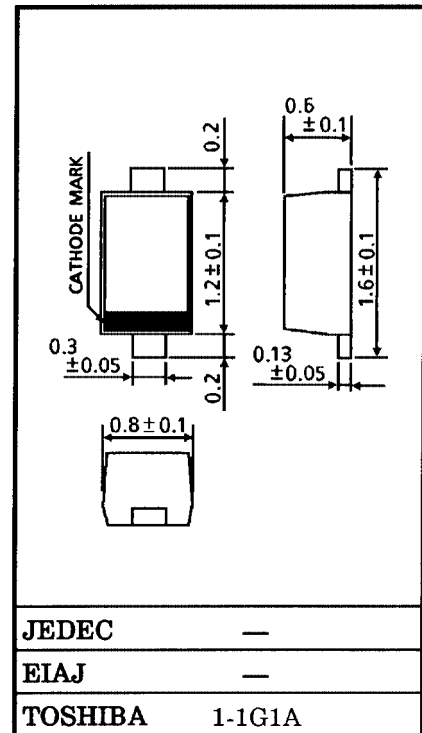
VCO for UHF band

- Small Package
- High Capacitance Ratio: $C_{1V}/C_{4V} = 2.0$ (typ.)
- Low Series Resistance : $r_s = 0.60 \Omega$ (typ.)

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 in mm



Weight: 0.0014 g

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Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|-------------------|-----------------|--|------|------|------|----------|
| Reverse voltage | V_R | $I_R = 1\ \mu\text{A}$ | 10 | — | — | V |
| Reverse current | I_R | $V_R = 10\ \text{V}$ | — | — | 3 | nA |
| Capacitance | C_{1V} | $V_R = 1\ \text{V}, f = 1\ \text{MHz}$ | 1.8 | 2.05 | 2.3 | pF |
| | C_{4V} | $V_R = 4\ \text{V}, f = 1\ \text{MHz}$ | 0.83 | 1.03 | 1.23 | |
| Capacitance ratio | C_{1V}/C_{4V} | — | 1.8 | 2 | — | — |
| Series resistance | r_s | $V_R = 1\ \text{V}, f = 470\ \text{MHz}$ | — | 0.6 | 0.8 | Ω |

Note: Signal level when capacitance is measured. $V_{\text{sig}} = 100\ \text{mV}_{\text{rms}}$

Marking



