

TOSHIBA Diode Silicon Epitaxial Planar Type

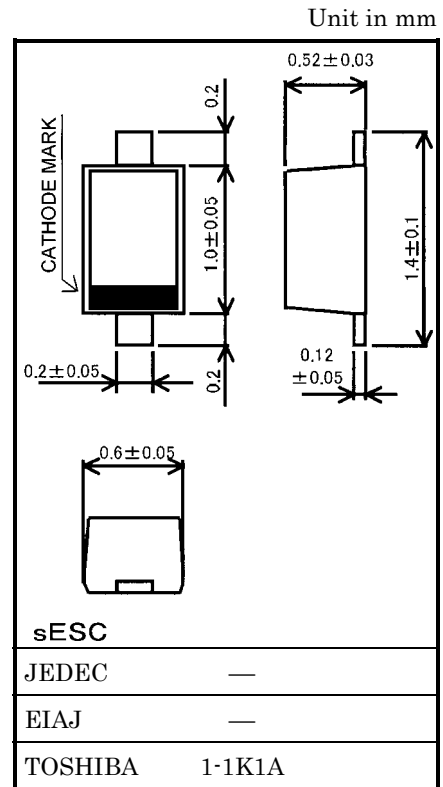
JDV2S01S

VCO for UHF band

- High capacitance ratio: $C_{1V}/C_{4V} = 2.0$ (typ.)
- Low series resistance: $r_s = 0.5 \Omega$ (typ.)
- This device is suitable for use in a small-size tuner.

Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---------------------------|-----------|---------|------|
| Reverse voltage | V_R | 10 | V |
| Junction temperature | T_j | 150 | °C |
| Storage temperature range | T_{stg} | -55~150 | °C |



Electrical Characteristics (Ta = 25°C)

| 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} | $V_R = 1 V, f = 1 MHz$ | 2.85 | 3.15 | 3.45 | pF |
| | C_{4V} | $V_R = 4 V, f = 1 MHz$ | 1.35 | 1.57 | 1.81 | |
| Capacitance ratio | C_{1V}/C_{4V} | — | 1.8 | 2 | 2.2 | — |
| Series resistance | r_s | $V_R = 1 V, f = 470 MHz$ | — | 0.5 | 0.7 | Ω |

Note: Signal level when capacitance is measured. $V_{sig} = 100 mV_{rms}$

Marking

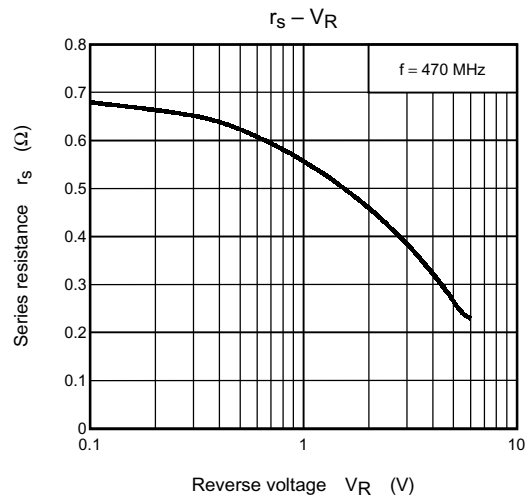
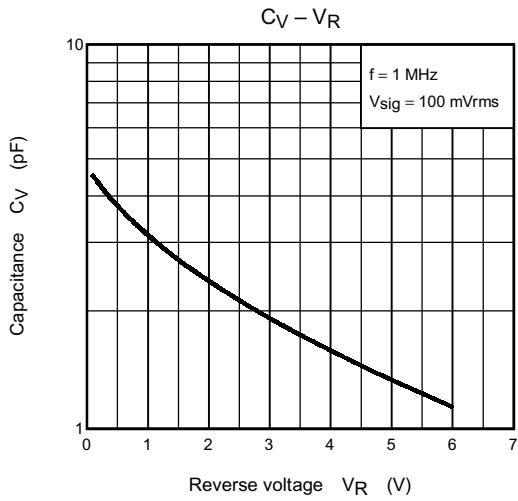


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