

TOSHIBA Diode Silicon Epitaxial Planar Type

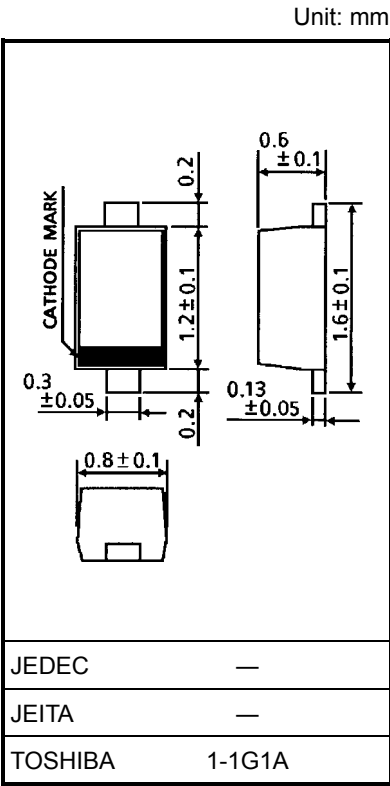
JDV2S05E

VCO for UHF band

- Small Package
- High Capacitance Ratio: $C_{1V}/C_{4V} = 1.9$ (typ.)
- Low Series Resistance : $r_s = 0.30\ \Omega$ (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 |



Electrical Characteristics (Ta = 25°C)

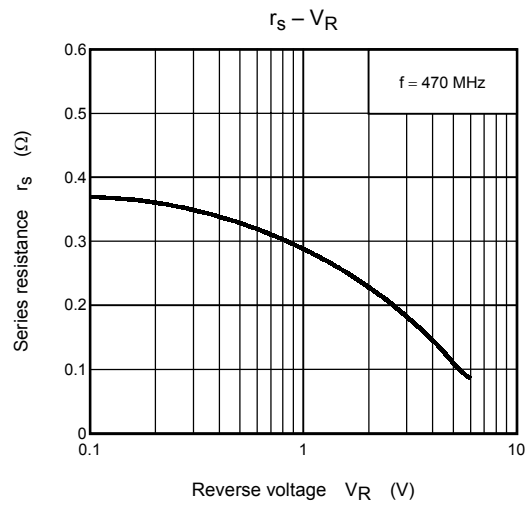
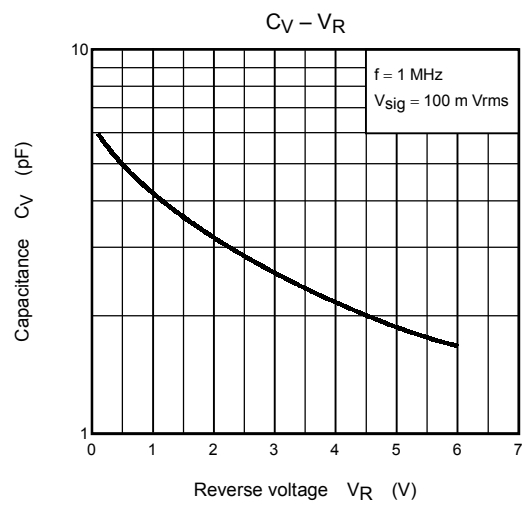
Weight: 0.0014 g (typ.)

| 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} | $V_R = 1\ V, f = 1\ MHz$ | 3.85 | 4.2 | 4.55 | pF |
| | C_{4V} | $V_R = 4\ V, f = 1\ MHz$ | 1.94 | 2.2 | 2.48 | |
| Capacitance ratio | C_{1V}/C_{4V} | — | 1.7 | 1.9 | — | — |
| Series resistance | r_s | $V_R = 1\ V, f = 470\ MHz$ | — | 0.3 | 0.5 | Ω |

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

Marking





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