

TOSHIBA Diode Silicon Epitaxial Planar Type

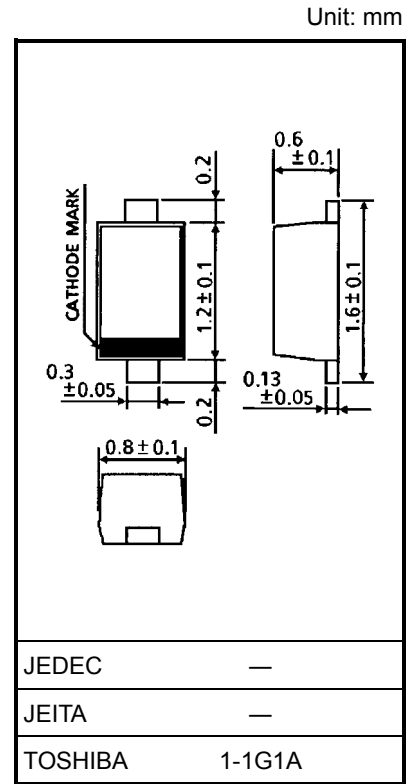
# JDV2S02E

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   |



Weight: 0.0014 g

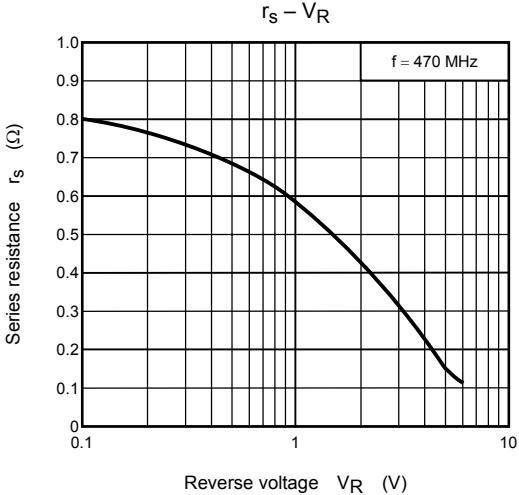
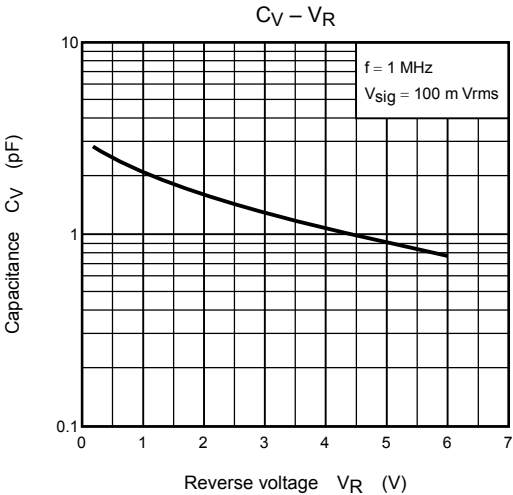
## Electrical Characteristics (Ta = 25°C)

| 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       | $C_{1V}$        | $V_R = 1 V, f = 1 MHz$   | 1.8  | 2.05 | 2.3  | pF       |
|                   | $C_{4V}$        | $V_R = 4 V, f = 1 MHz$   | 0.83 | 1.03 | 1.23 |          |
| Capacitance ratio | $C_{1V}/C_{4V}$ | —                        | 1.8  | 2    | —    | —        |
| Series resistance | $r_s$           | $V_R = 1 V, f = 470 MHz$ | —    | 0.6  | 0.8  | $\Omega$ |

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

## Marking





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