Unit: mm

**TOSHIBA** 

TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

# 1SV229

#### VCO for UHF Band Radio

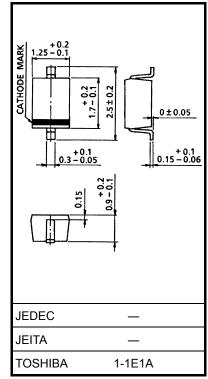
- Ultra low series resistance:  $r_s = 0.2 \Omega$  (typ.)
- Useful for small size set

#### Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V <sub>R</sub>	15	V
Junction temperature	Тј	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).



Weight: 0.004 g (typ.)

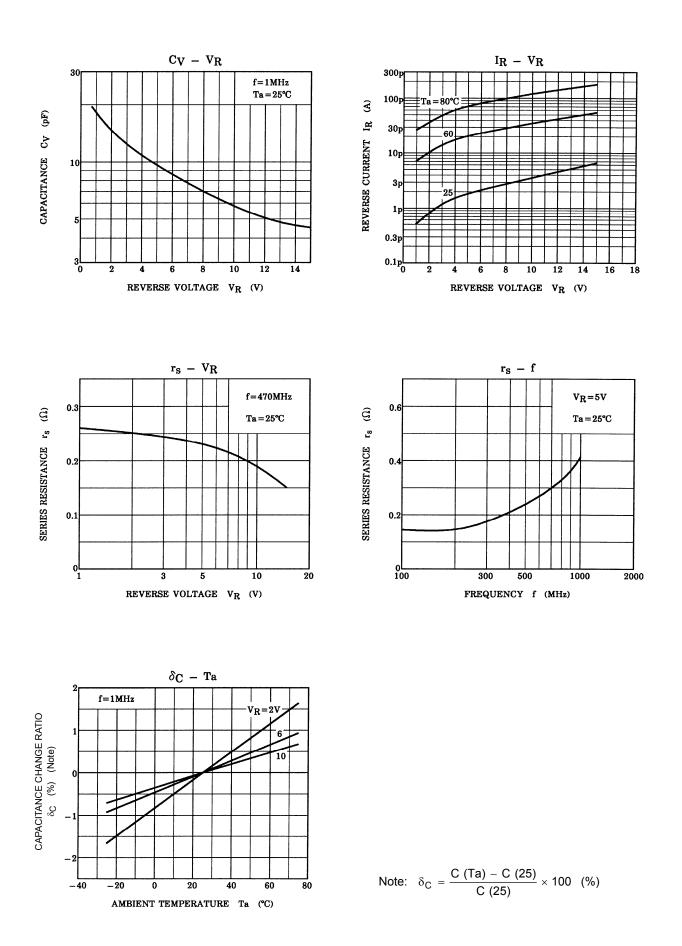
#### Unit Characteristics Symbol **Test Condition** Min Тур. Max 15 V Reverse voltage $I_R = 1 \mu A$ $V_R$ \_\_\_\_ \_\_\_\_ Reverse current $I_R$ V<sub>R</sub> = 15 V 3 nA Capacitance $C_{2V}$ V<sub>R</sub> = 2 V, f = 1 MHz 14 15 16 pF 6 Capacitance $C_{10 V}$ V<sub>R</sub> = 10 V, f = 1 MHz 5.5 6.5 pF 2.0 2.5 Capacitance ratio C2 V/C10 V Series resistance V<sub>R</sub> = 5 V, f = 470 MHz 0.2 0.4 Ω rs

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

#### Marking



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