TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV225

Electronic Tuning Applications of FM Receivers

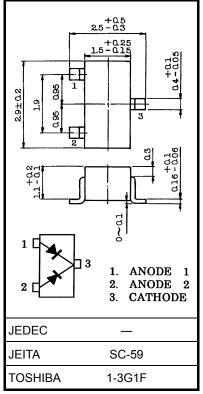
- Low series resistance: $r_s = 0.35$ (typ.)
- Small package

Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V _R	32	V
Junction temperature	Тј	125	°C
Storage temperature range	T _{stg}	-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: 0.013 g (typ.)

(Note 1)

(Note 1)

2.6

0.35

Max

50

21

7.7

2.9

0.5

Unit

V

nA

pF

pF

Ω

Characteristics Symbol **Test Condition** Min Тур. 32 Reverse voltage V_R $I_R = 10 \ \mu A$ ____ Reverse current I_R V_R = 30 V Capacitance C_{3V} V_R = 3 V, f = 1 MHz (Note 1) 18.5 19.7 (Note 1) Capacitance $C_{30 V}$ V_R = 30 V, f = 1 MHz 6.6 7.2

C3 V/C30 V

Series resistance r_s $V_R = 3 V, f = 100 MHz$

Electrical Characteristics (Ta = 25°C)

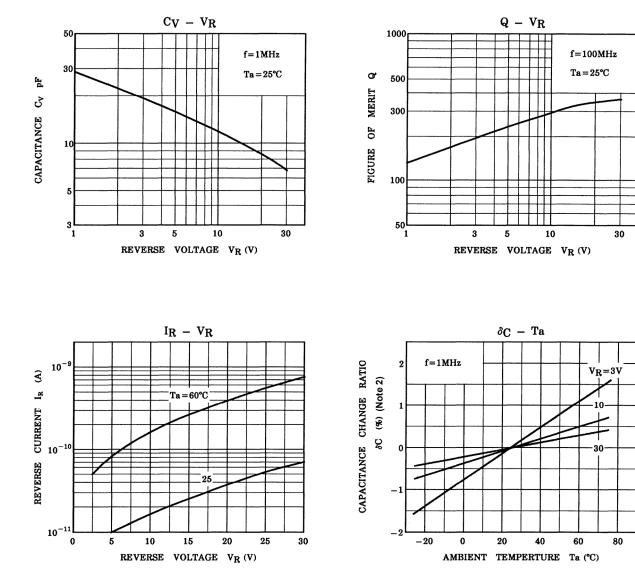
Note 1: Characteristics between anode 1 and anode 2

Marking

Capacitance ratio



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Note 2: $\delta_{C} = \frac{C (Ta) - C (25)}{C (25)} \times 100$ (%)

RESTRICTIONS ON PRODUCT USE

20070701-EN GENERAL

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