Unit: mm

TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

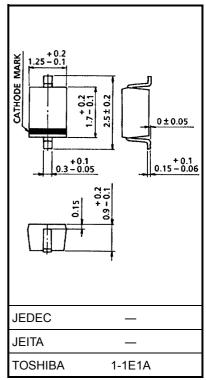
1SV214

TV Tuning

- High capacitance ratio: C2 V/C25 V = 6.5 (typ.)
- Low series resistance: $r_s = 0.4 \Omega$ (typ.)
- Excellent C-V characteristics, and small tracking error.
- Useful for small size tuner.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V _R	30	V
Peak reverse voltage	V _{RM}	35 (R _L = 10 k Ω)	V
Junction temperature	Тј	125	°C
Storage temperature range	T _{stg}	-55~125	°C



Weight: 0.004 g (typ.)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V _R	I _R = 1 μA	30	_	_	V
Reverse current	I _R	V _R = 28 V	_	_	10	nA
Capacitance	C2 V	V _R = 2 V, f = 1 MHz	14.16	_	16.25	pF
Capacitance	C25 V	V _R = 25 V, f = 1 MHz	2.11	_	2.43	pF
Capacitance ratio	C2 V/C25 V		5.90	6.50	7.15	—
Series resistance	r _s	V _R = 5 V, f = 470 MHz	_	0.4	0.55	Ω

Note 1: Units are compounded in one package and are matched to 2.5%.

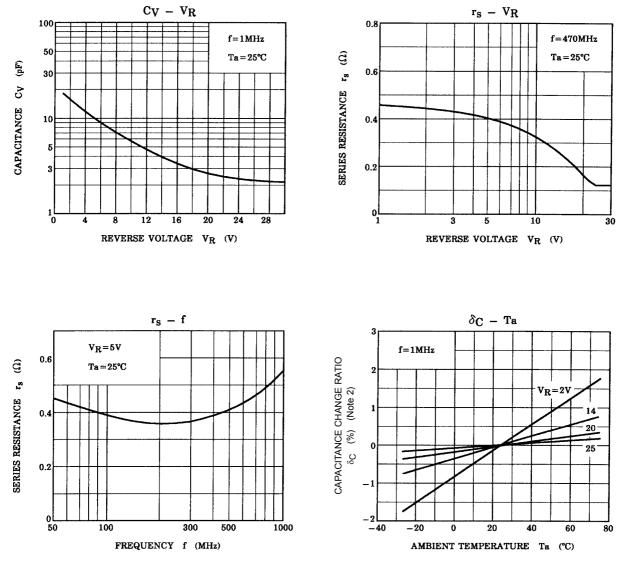
$$\frac{C (max) - C (min)}{C (min)} \leq 0.025$$

(V_R = 2~25 V)

Marking



TOSHIBA



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

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