

TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV217

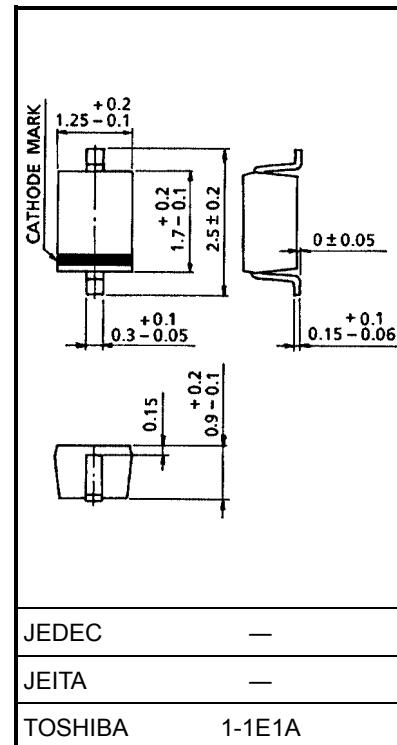
CATV Tuning

Unit: mm

- High capacitance ratio: $C_2 \text{ V}/C_{25} \text{ V} = 12.5$ (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 ($R_L = 10 \text{ k}\Omega$)	V
Junction temperature	T _j	125	°C
Storage temperature range	T _{stg}	-55~125	°C

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

Weight: 0.004 g (typ.)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V _R	I _R = 1 μA	30	—	—	V
Reverse current	I _R	V _R = 28 V	—	—	10	nA
Capacitance	C ₂ V	V _R = 2 V, f = 1 MHz	33	36	39	pF
Capacitance	C ₂₅ V	V _R = 25 V, f = 1 MHz	2.6	2.88	3.2	pF
Capacitance ratio	C ₂ V/C ₂₅ V	—	11.5	12.5	—	—
Series resistance	r _s	V _R = 5 V, f = 470 MHz	—	0.83	1.0	Ω

Note 1: Available in matched group for capacitance to 2.5%.

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

(V_R = 2~25 V)**Marking**