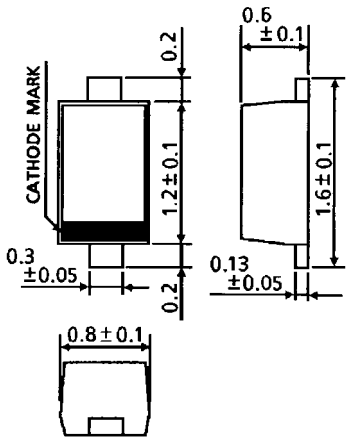
TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV286

CATV Converter 1'st OSC Tuning

- High capacitance ratio: $C_{2\ V}/C_{20\ V}$ = 8.9 (typ.)
- Low series resistance: r_s = 0.73 Ω (typ.)
- Useful for small size tuner.

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	1-1G1A

Weight: 0.0014 g (typ.)

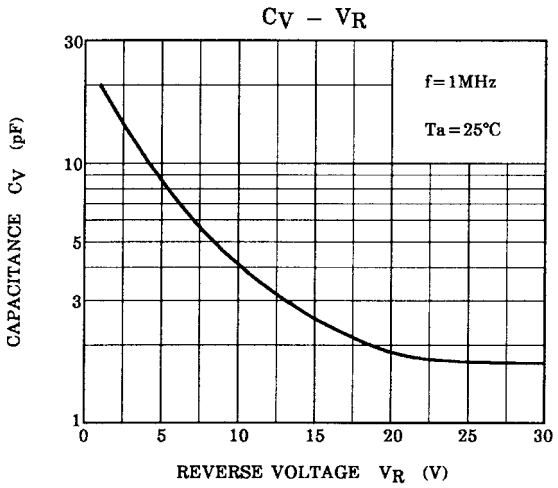
Maximum Ratings (Ta = 25°C)

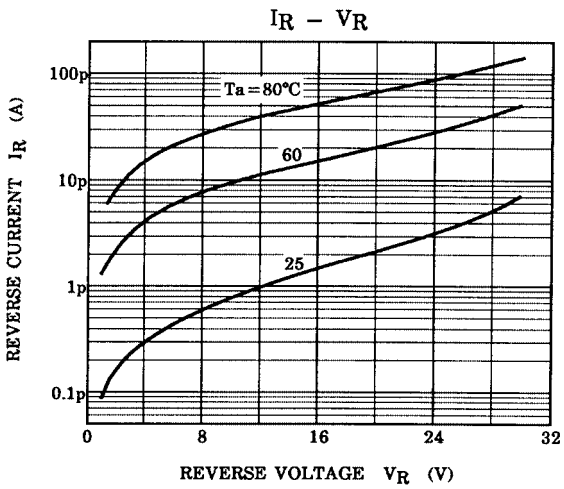
Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	30	V
Peak reverse voltage	V_{RM}	35 (R_L = 10 kΩ)	V
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	−55~125	°C

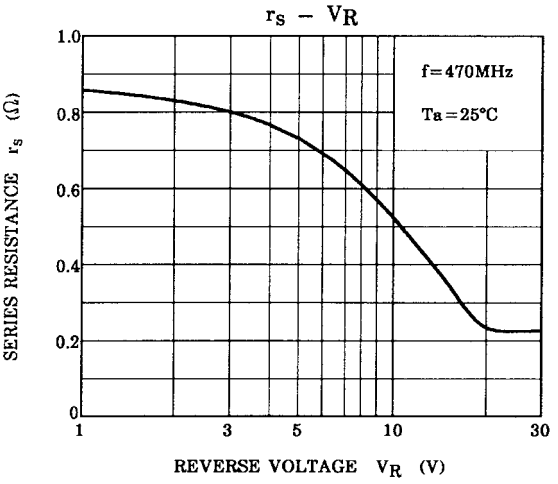
Electrical Characteristics (Ta = 25°C)

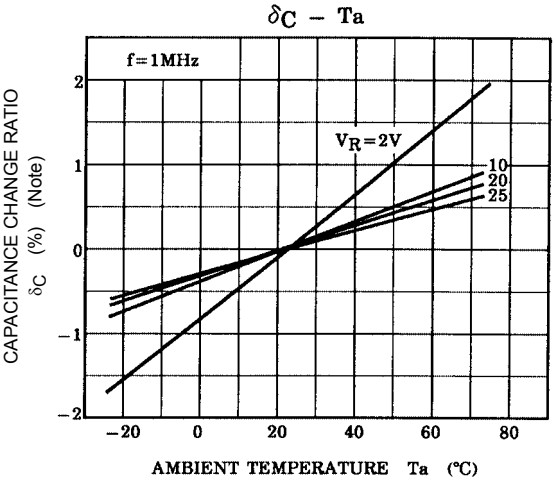
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 1 μA	30	—	—	V
Reverse current	I_R	V_R = 28 V	—	—	10	nA
Capacitance	$C_{2\ V}$	V_R = 2 V, f = 1 MHz	14.5	—	16.1	pF
Capacitance	$C_{20\ V}$	V_R = 20 V, f = 1 MHz	1.56	—	1.86	pF
Capacitance ratio	$C_{2\ V}/C_{20\ V}$	—	7.8	8.9	—	—
Series resistance	r_s	V_R = 5 V, f = 470 MHz	—	0.73	0.9	Ω

Marking









Note: $\delta_C = \dfrac{C\,(Ta) - C\,(25)}{C\,(25)} \times 100 \quad (\%)$

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