TOSHIBA Variable Capacitance Diode Silicon Epitaxial Planar Type

1SV284

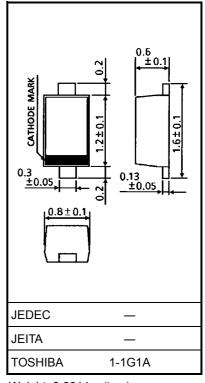
VCO for V/UHF Band Radio

Unit: mm

- High capacitance ratio: $C_1 \text{ V}/C_4 \text{ V} = 2.0 \text{ (typ.)}$
- Low series resistance: $r_s = 0.22 \Omega$ (typ.)
- Useful for small size tuner.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_{R}	10	V
Junction temperature	Tj	125	°C
Storage temperature range	T _{stg}	−55~125	°C



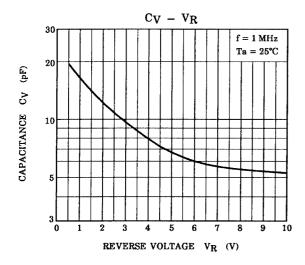
Weight: 0.0014 g (typ.)

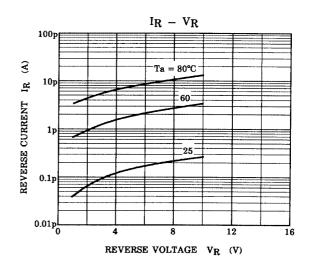
Electrical Characteristics (Ta = 25°C)

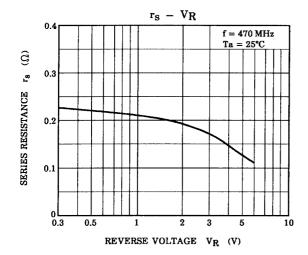
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V_{R}	$I_R = 1 \mu A$	10	_	_	V
Reverse current	I _R	V _R = 10 V	_	_	3	nA
Capacitance	C _{1 V}	V _R = 1 V, f = 1 MHz	15	_	17	pF
Capacitance	C _{4 V}	V _R = 4 V, f = 1 MHz	7.0	_	8.5	pF
Capacitance ratio	C _{1 V} /C _{4 V}	_	1.8	2.0	_	_
Series resistance	r _S	V _R = 1 V, f = 470 MHz	_	0.22	0.4	Ω

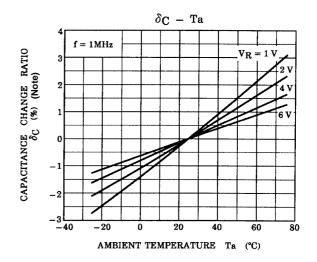
Marking











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

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