TOSHIBA Diode Silicon Epitaxial Planar Type

# 1SV310

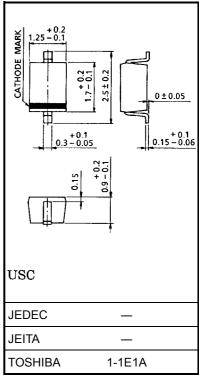
#### VCO for UHF Band Radio

Unit: mm

- High capacitance ratio:  $C_1 \text{ V}/C_4 \text{ V} = 2.1 \text{ (typ.)}$
- Low series resistance:  $r_s = 0.28 \Omega$  (typ.)
- Useful for small size tuner

## **Maximum Ratings (Ta = 25°C)**

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	10	٧
Junction temperature	Tj	125	°C
Storage temperature range	T <sub>stg</sub>	-55~125	°C



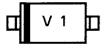
Weight: 0.004 g (typ.)

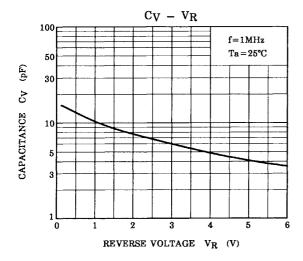
## **Electrical Characteristics (Ta = 25°C)**

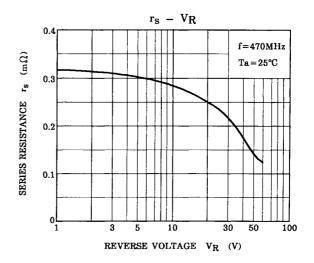
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	$V_{R}$	$I_R = 1 \mu A$	10	_	_	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 10 V	_	_	3	nA
Capacitance	C <sub>1 V</sub>	V <sub>R</sub> = 1 V, f = 1 MHz	9.7	_	11.1	pF
Capacitance	C <sub>4 V</sub>	V <sub>R</sub> = 4 V, f = 1 MHz	4.45	_	5.45	pF
Capacitance ratio	C <sub>1 V</sub> /C <sub>4 V</sub>	_	1.8	2.1	_	_
Series resistance	r <sub>s</sub>	V <sub>R</sub> = 1 V, f = 470 MHz		0.28	0.4	Ω

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### Marking







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