TOSHIBA Diode Silicon Epitaxial Planar Type

# **JDV2S09S**

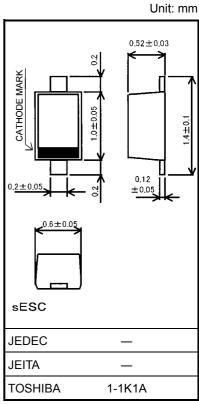
#### VCO for UHF band

• High capacitance ratio:  $C_{1V}/C_{4V} = 2.1$  (typ.)

- Low series resistance:  $r_s = 0.33 \Omega$  (typ.)
- This device is suitable for use in a small-size tuner.

### Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	$V_{R}$	10	٧
Junction temperature	Tj	150	°C
Storage temperature range	T <sub>stg</sub>	<b>−55~150</b>	°C



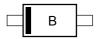
Weight: 0.0011 g (typ.)

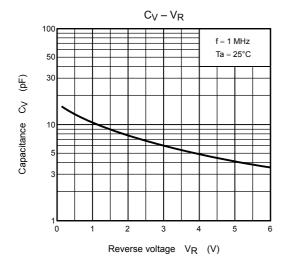
## **Electrical Characteristics (Ta = 25°C)**

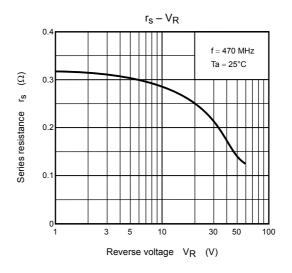
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	$V_{R}$	$I_R = 1 \mu A$	10	_	_	V
Reverse current	I <sub>R</sub>	V <sub>R</sub> = 10 V	_	_	3	nA
Capacitance	C <sub>1V</sub>	V <sub>R</sub> = 1 V, f = 1 MHz	9.7	_	11.1	- pF
	C <sub>4V</sub>	V <sub>R</sub> = 4 V, f = 1 MHz	4.45	_	5.45	
Capacitance ratio	C <sub>1V</sub> /C <sub>4V</sub>	_	1.8	2.1	_	_
Series resistance	r <sub>s</sub>	V <sub>R</sub> = 1 V, f = 470 MHz	_	0.33	0.45	Ω

Note: Signal level when capacitance is measured.  $V_{sig} = 500 \text{ mVrms}$ 

## Marking







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000707EAA

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