TOSHIBA Diode Silicon Epitaxial Planar Type

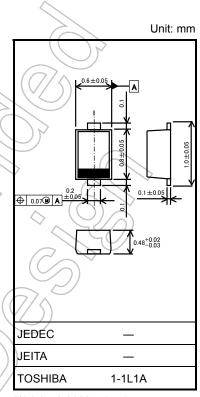
# JDV2S09FS

#### 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	(Vý )
Junction temperature	Tj	150	, c
Storage temperature range	T <sub>stg</sub>	-55~150	ւ



Weight: 0.0006 g (typ.)

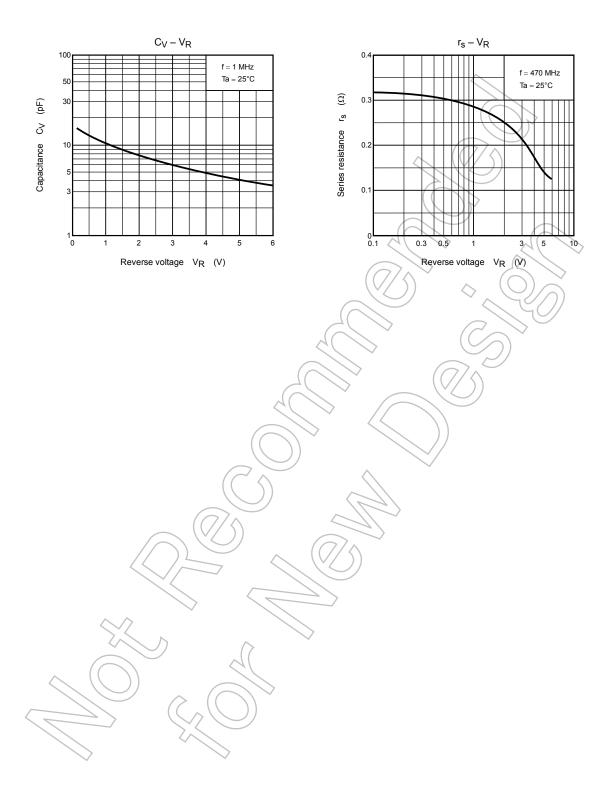
### Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	$V_{R}$	I <sub>R</sub> = 1 μA	10	_	_	V
Reverse current	IR	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>	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	4.45	_	5.45	
Capacitance ratio	C <sub>1V</sub> /C <sub>4V</sub>	_	1.8	2.1	_	_
Series resistance		V <sub>R</sub> = 1 V, f = 470 MHz	_	0.33	0.45	Ω

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

Marking







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