TOSHIBA Diode Silicon Epitaxial Planar Type

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JDV2S29FS

VCO for UHF Band Radio

High capacitance ratio : C_{1V}/C_{4V} =2.8 (typ.)

• Low series resistance : $r_S = 0.66 \Omega$ (typ.)

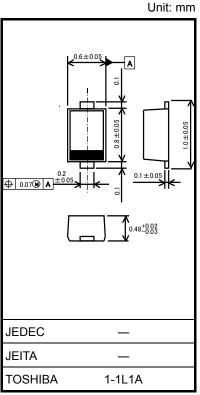
• This device is suitable for use in small tuners.

Absolute Maximum Ratings (Ta = 25°C)

Characteristic	Symbol	Rating	Unit
Reverse voltage	V_{R}	10	٧
Junction temperature	Tj	150	°C
Storage temperature range	T _{stg}	-55~150	°C

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.

Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).



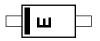
Weight: 0.0006 g (typ.)

Electrical Characteristics (Ta = 25°C)

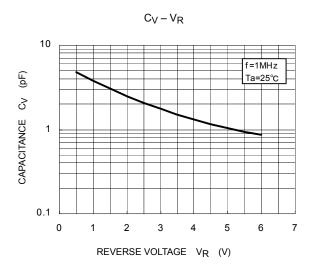
Characteristic	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V_{R}	$I_R = 1 \mu A$	10	_	_	V
Reverse current	I _R	V _R = 6 V	_	_	1	nA
Capacitance	C _{1V}	V _R = 1 V, f = 1 MHz	3.59	_	3.87	- pF
	C _{4V}	V _R = 4 V, f = 1 MHz	1.26	_	1.4	
Capacitance ratio	C _{1V} /C _{4V}	_	2.73	_	2.91	_
Series resistance	r _S	V _R = 1 V, f = 470 MHz	_	0.66	0.77	Ω

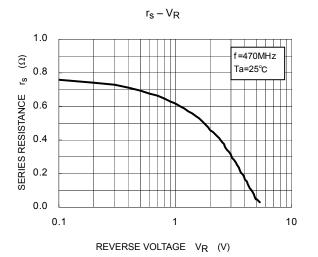
Note: Signal level when capacitance is measured. $V_{sig} = 100 \text{mVrms}$

Marking



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20070701-EN GENERAL

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