TOSHIBA Diode Silicon Epitaxial Planar Type

JDV2S05E

VCO for UHF band

• Small Package

• High Capacitance Ratio: $C_{1V}/C_{4V} = 1.9$ (typ.)

• Low Series Resistance : $r_8 = 0.30 \Omega$ (typ.)

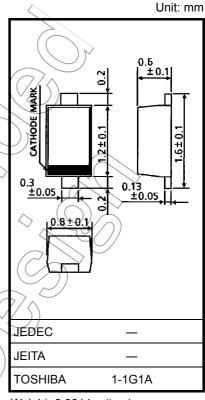
Absolute Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_{R}	10	(\nearrow)
Junction temperature	Tj	125	(c)
Storage temperature range	T _{stg}	-55~125),Ĉ

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: 0.0014 g (typ.)

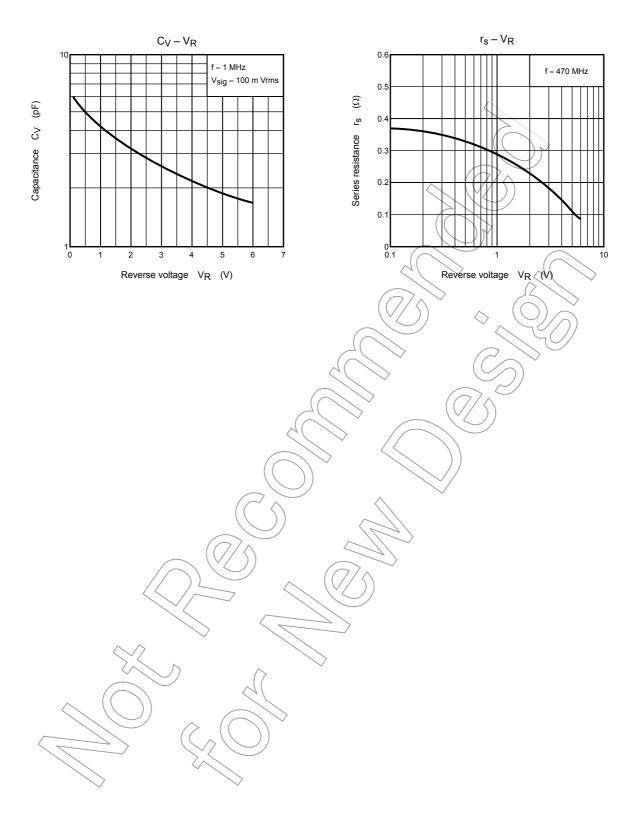
Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	VR	I _R =1 μA	10	_	_	V
Reverse current	IR	V _R = 10 V	_	_	3	nA
Capacitance	∕>C _{1V}	V _R = 1 V, f = 1 MHz	3.85	4.2	4.55	- pF
	C _{4V}	V _R = 4 V, f = 1 MHz	1.94	2.2	2.48	
Capacitance ratio	C1V/C4V	_	1.7	1.9	_	_
Series resistance)) r _s	V _R = 1 V, f = 470 MHz	_	0.3	0.5	Ω

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

Marking





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