

TOSHIBA Diode Silicon Epitaxial Planar Type

JDV2S01E

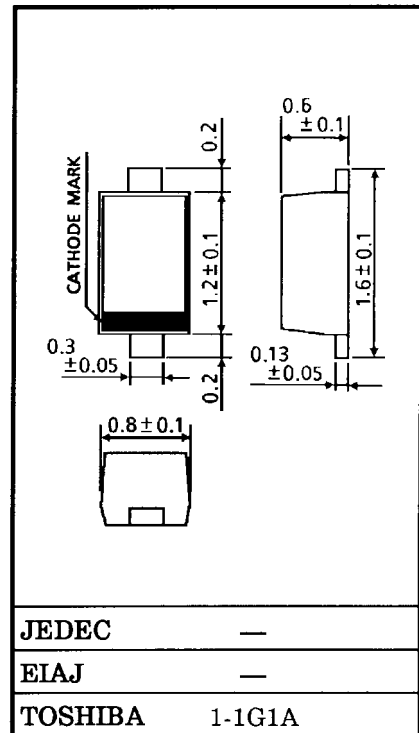
VCO for UHF band

Unit in mm

- Small Package
- High Capacitance Ratio: $C_{1V}/C_{4V} = 2.0$ (typ.)
- Low Series Resistance : $r_s = 0.5 \Omega$ (typ.)

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55~125	°C



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Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	$I_R = 1 \mu\text{A}$	10	—	—	V
Reverse current	I_R	$V_R = 10 \text{ V}$	—	—	3	nA
Capacitance	C_{1V}	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	2.85	3.15	3.45	pF
	C_{4V}	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	1.35	1.57	1.81	
Capacitance ratio	C_{1V}/C_{4V}	—	1.8	2	—	—
Series resistance	r_s	$V_R = 1 \text{ V}, f = 470 \text{ MHz}$	—	0.5	0.7	Ω

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

Marking



