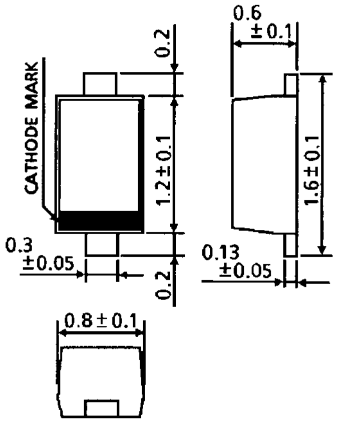
TOSHIBA Diode Silicon Epitaxial Planar Type

JDV2S02E

VCO for UHF band

- Small Package
- High Capacitance Ratio: $C_{1V}/C_{4V} = 2.0$ (typ.)
- Low Series Resistance: $r_s = 0.60\ \Omega$ (typ.)

Unit: mm



JEDEC	—
JEITA	—
TOSHIBA	1-1G1A

Weight: 0.0014 g

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

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	$I_R = 1\ \mu A$	10	—	—	V
Reverse current	I_R	$V_R = 10$ V	—	—	3	nA
Capacitance	C_{1V}	$V_R = 1$ V, f = 1 MHz	1.8	2.05	2.3	pF
	C_{4V}	$V_R = 4$ V, f = 1 MHz	0.83	1.03	1.23	
Capacitance ratio	C_{1V}/C_{4V}	—	1.8	2	—	—
Series resistance	r_s	$V_R = 1$ V, f = 470 MHz	—	0.6	0.8	Ω

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

Marking