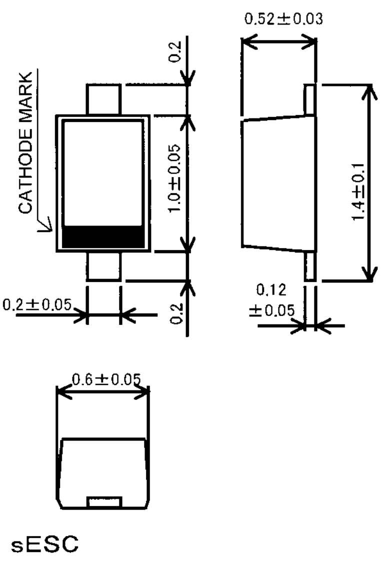
TOSHIBA Diode Silicon Epitaxial Planar Type

JDV2S02S

VCO for UHF band

- High capacitance ratio: C_{1V}/C_{4V} = 2.0 (typ.)
- Low series resistance: r_s = 0.6 Ω (typ.)
- This device is suitable for use in a small-size tuner.

Unit: mm



JEDEC	―
JEITA	―
TOSHIBA	1-1K1A

Weight: 0.0011 g (typ.)

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	−55~150	°C

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 1 μA	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	2.2	―
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 mVrms

Marking