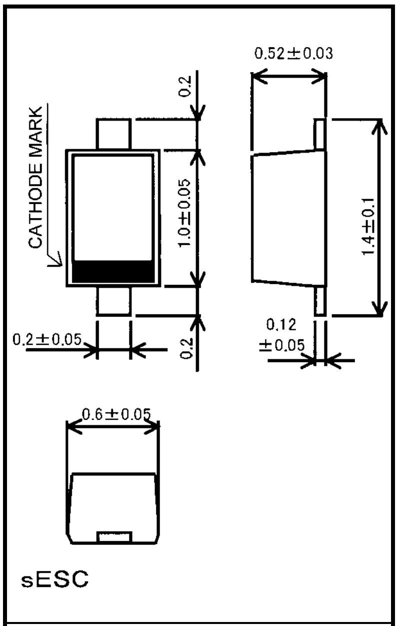
TOSHIBA DIODE Silicon Epitaxial Planar Type

JDV2S10S

VCO for UHF Band Radio

- High Capacitance Ratio: $C_{0.5V}/C_{2.5V} = 2.5$ (typ.)
- Low Series Resistance : $r_s = 0.35\ \Omega$ (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	$I_R = 1\ \mu A$	10	―	―	V
Reverse current	I_R	$V_R = 10$ V	―	―	3	nA
Capacitance	$C_{0.5V}$	$V_R = 0.5$ V, f = 1 MHz	7.3	―	8.4	pF
	$C_{2.5V}$	$V_R = 2.5$ V, f = 1 MHz	2.75	―	3.4	
Capacitance ratio	$C_{0.5V}/C_{2.5V}$	―	2.4	2.5	―	―
Series resistance	r_s	$V_R = 1$ V, f = 470 MHz	―	0.35	0.5	Ω

Note: Signal level when capacitance is measured: $V_{sig} = 500$ mVrms

Marking