

TOSHIBA DIODE Silicon Epitaxial Planar Type

**JDV2S08S**

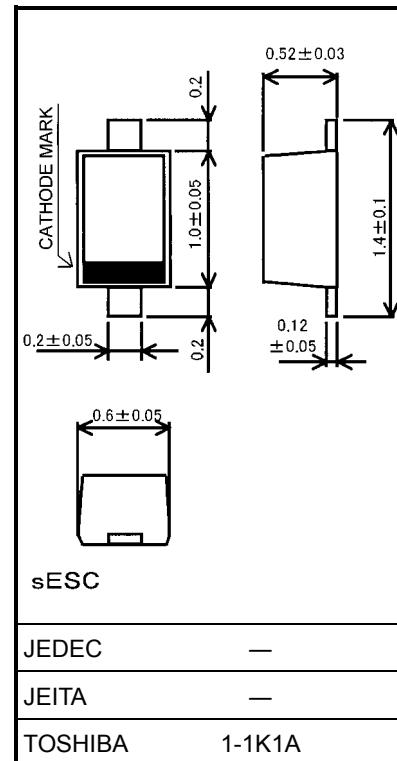
VCO for UHF Band Radio

Unit: mm

- High Capacitance Ratio:  $C_{1V}/C_{4V} = 3.0$  (typ.)
- Low Series Resistance :  $r_s = 0.35 \Omega$  (typ.)
- This device is suitable for use in a small-size tuner.

**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



Weight: 0.0011 g (typ.)

**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	$C_{1V}$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	17.3	18.3	19.3	pF
	$C_{4V}$	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	5.3	6.1	6.6	
Capacitance ratio	$C_{1V}/C_{4V}$	—	2.8	3	—	—
Series resistance	$r_s$	$V_R = 1 \text{ V}, f = 470 \text{ MHz}$	—	0.35	0.45	Ω

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