

TOSHIBA DIODE Silicon Epitaxial Planar Type

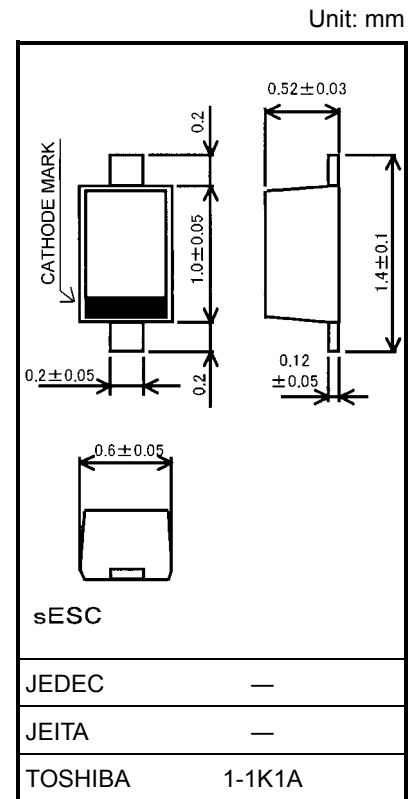
# JDV2S10S

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.

## 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



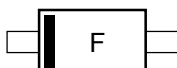
Weight: 0.0011 g (typ.)

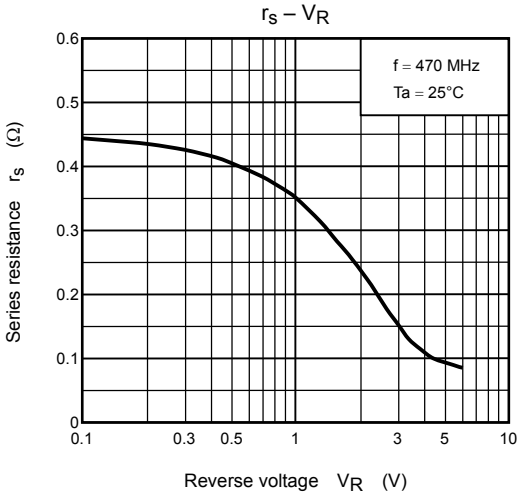
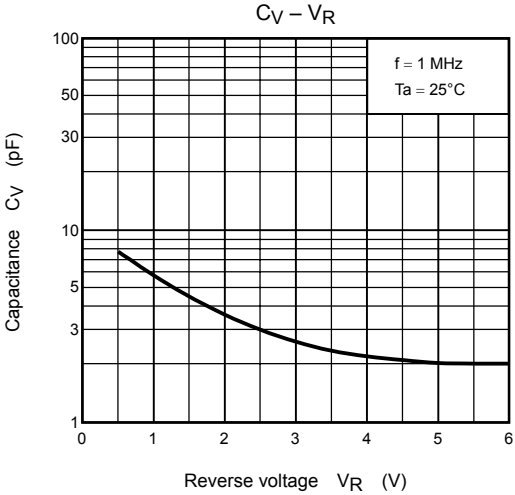
## Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	$V_R$	$I_R = 1 \mu A$	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	$\Omega$

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

## Marking





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