

TOSHIBA Diode Silicon Epitaxial Planar Type

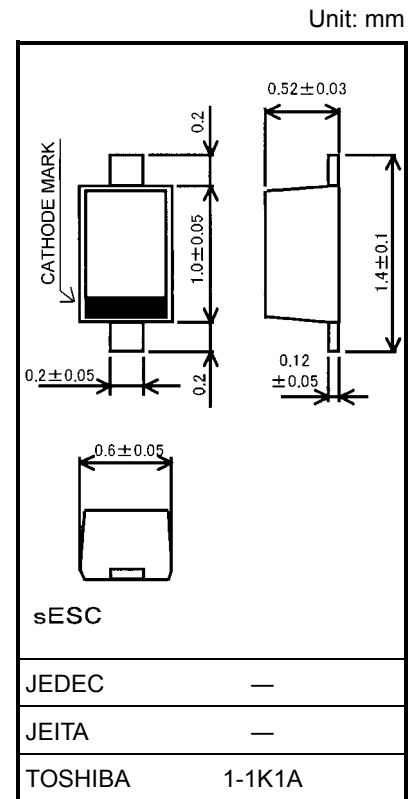
JDV2S13S

VCO for UHF Band Radio

- High capacitance ratio: $C_{1V}/C_{4V} = 2.8$ (typ.)
- Low series resistance: $r_s = 0.55 \Omega$ (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



Electrical Characteristics (Ta = 25°C)

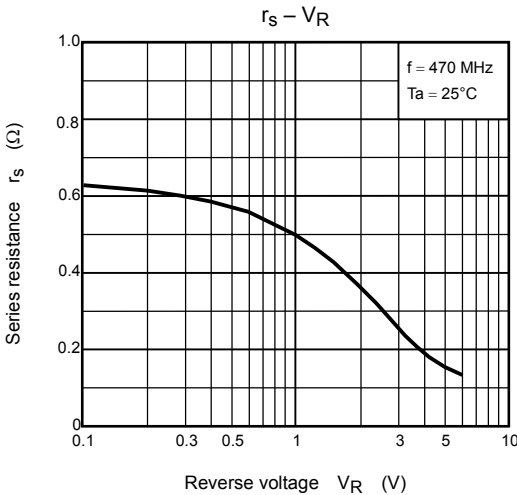
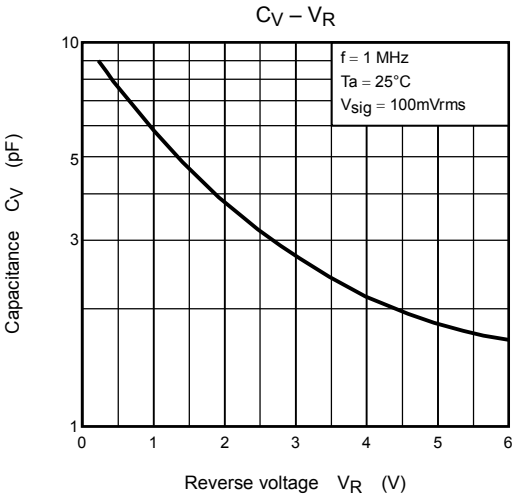
Weight: 0.0011 g (typ.)

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}	$V_R = 1 V, f = 1 MHz$	5.7	—	6.7	pF
	C_{4V}	$V_R = 4 V, f = 1 MHz$	1.85	—	2.45	
Capacitance ratio	C_{1V}/C_{4V}	—	2.7	2.8	—	—
Series resistance	r_s	$V_R = 1 V, f = 470 MHz$	—	0.55	0.7	Ω

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

Marking





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