

TOSHIBA Diode Silicon Epitaxial Planar Type

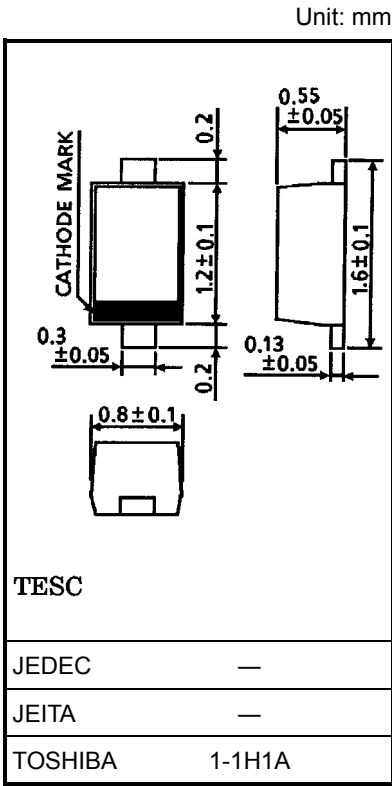
JDV2S10T

VCO for UHF Band Radio

- High capacitance ratio: $C_{0.5\text{ V}}/C_{2.5\text{ V}} = 2.5$ (typ.)
- Low series resistance: $r_s = 0.35\ \Omega$ (typ.)
- Useful for small size tuner.

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55~125	°C



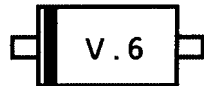
Electrical Characteristics (Ta = 25°C)

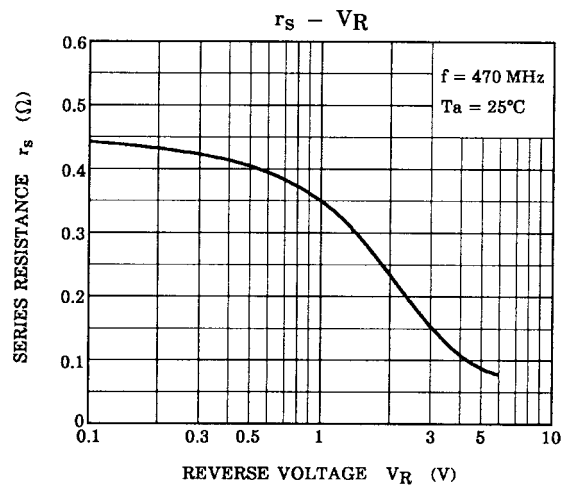
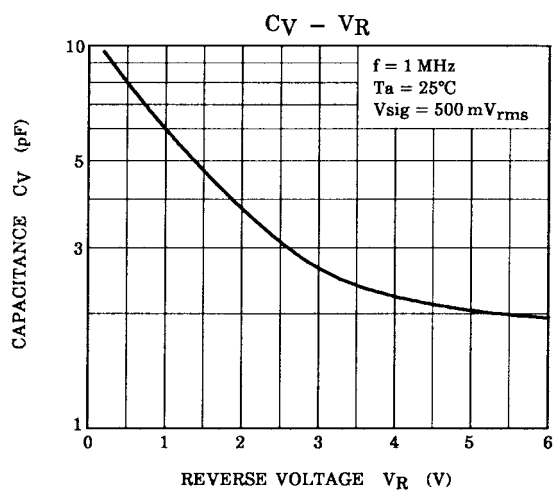
Weight: 0.0013 g (typ.)

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	$C_{0.5\text{ V}}$	$V_R = 0.5\text{ V}, f = 1\text{ MHz}$	7.3	—	8.4	pF
Capacitance	$C_{2.5\text{ V}}$	$V_R = 2.5\text{ V}, f = 1\text{ MHz}$	2.75	—	3.4	pF
Capacitance ratio	$C_{0.5\text{ V}}/C_{2.5\text{ V}}$	—	2.4	2.5	—	—
Series resistance	r_s	$V_R = 1\text{ V}, f = 470\text{ MHz}$	—	0.35	0.5	Ω

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

Marking





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