

TOSHIBA DIODE Silicon Epitaxial Planar Type

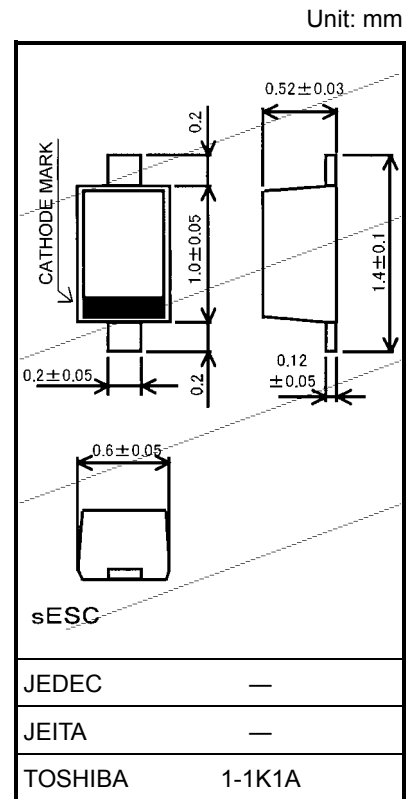
JDV2S07S

VCO for UHF Band Radio

- High Capacitance Ratio: $C_{1V}/C_{4V} = 2.3$ (typ.)
- Low Series Resistance : $r_s = 0.42 \Omega$ (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)

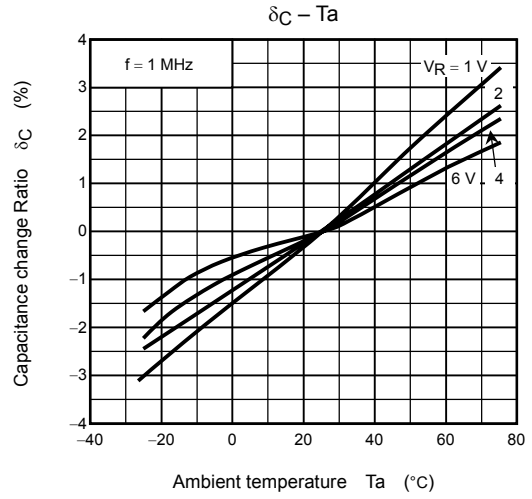
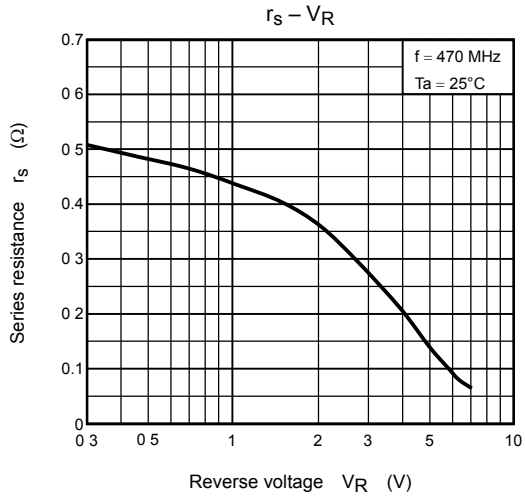
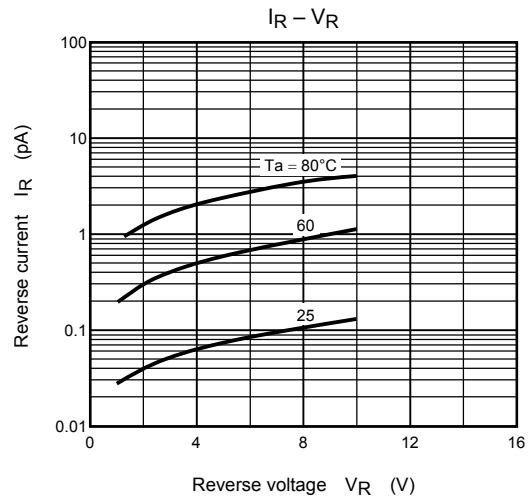
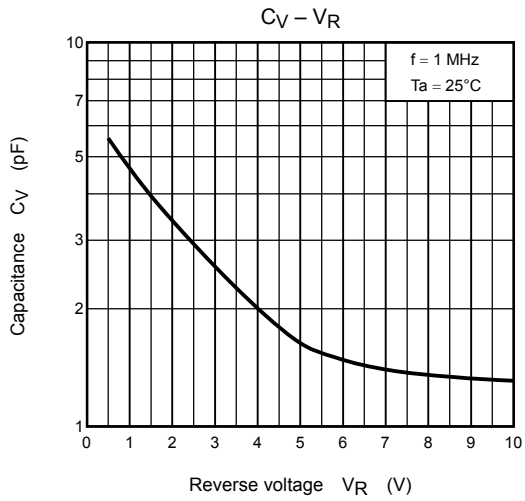
Weight: 0.0011 g (typ.)

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}	$V_R = 1 V, f = 1 MHz$	4.0	4.5	4.9	pF
	C_{4V}	$V_R = 4 V, f = 1 MHz$	1.85	2.0	2.35	
Capacitance ratio	C_{1V}/C_{4V}	—	2.0	2.3	—	—
Series resistance	r_s	$V_R = 1 V, f = 470 MHz$	—	0.42	0.55	Ω

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

Marking





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