

TOSHIBA DIODE Silicon Epitaxial Planar Type

JDV2S07FS

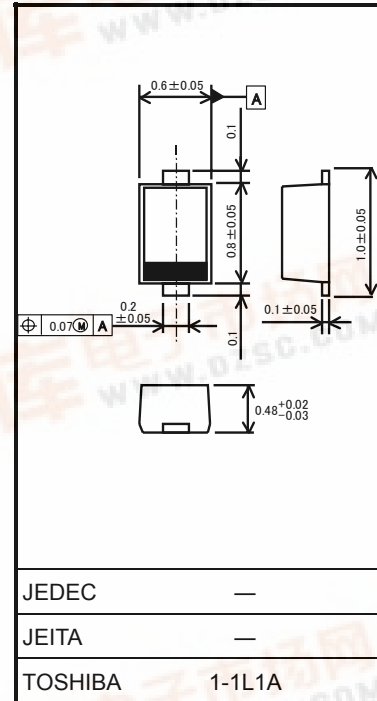
VCO for UHF Band Radio

Unit: mm

- 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 ($T_a = 25^\circ\text{C}$)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55~150	$^\circ\text{C}$



Weight: 0.0006 g (typ.)

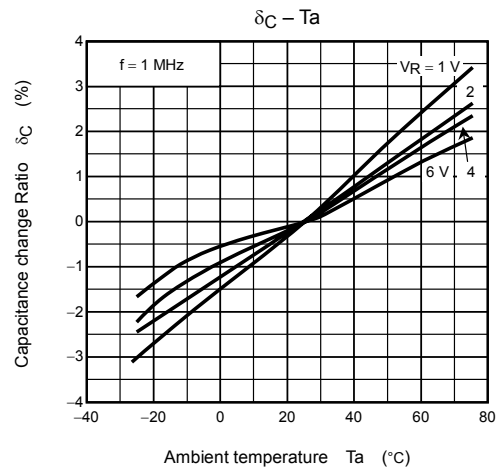
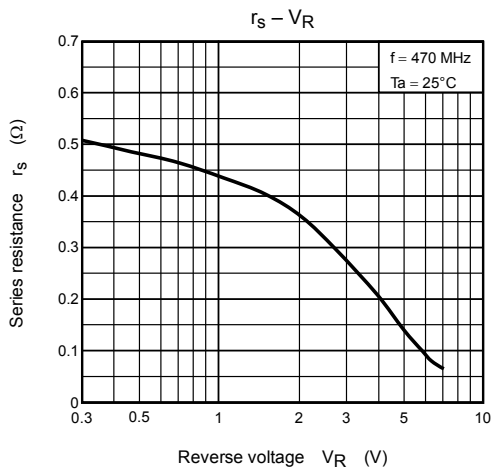
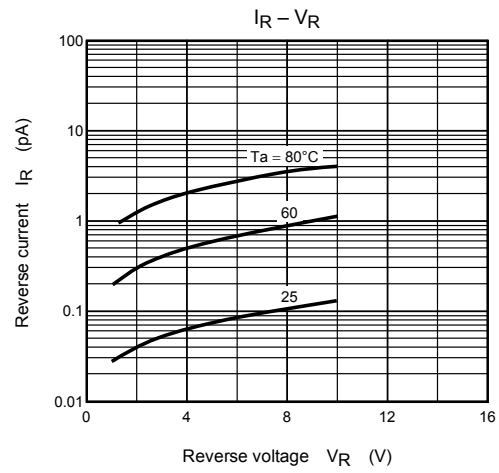
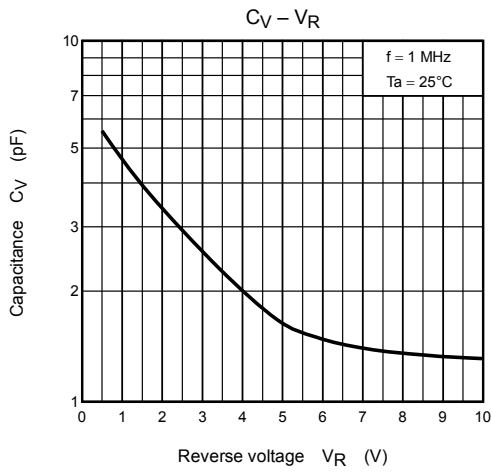
Electrical Characteristics ($T_a = 25^\circ\text{C}$)

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

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

Marking





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