

TENTATIVE TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV306

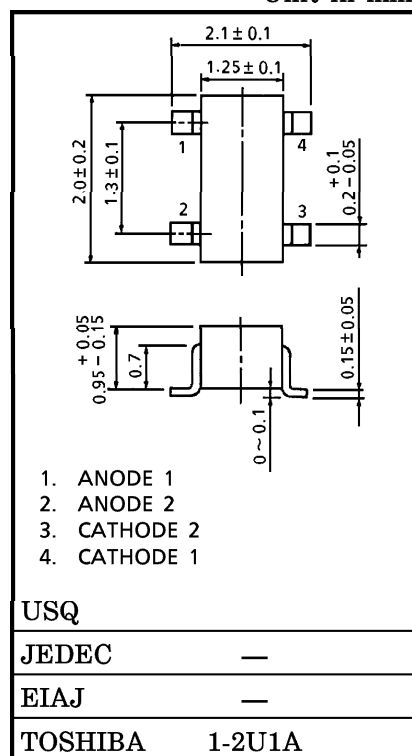
VCO FOR UHF BAND RADIO

Unit in mm

- Small Package
- Ultra Low Series Resistance : $r_s = 0.20 \Omega$ (Typ.)

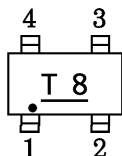
MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATIN	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	$-55 \sim 125$	$^\circ\text{C}$

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

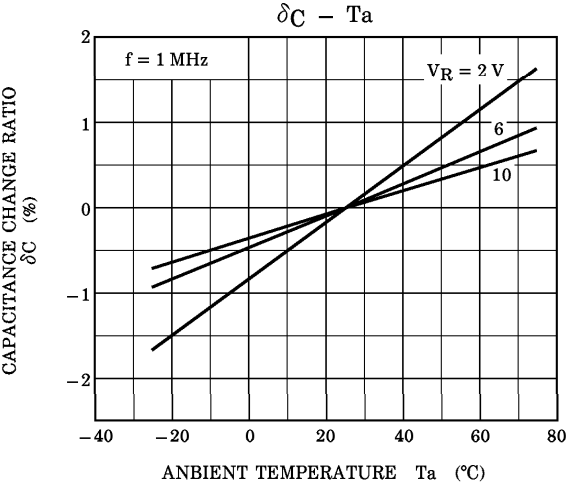
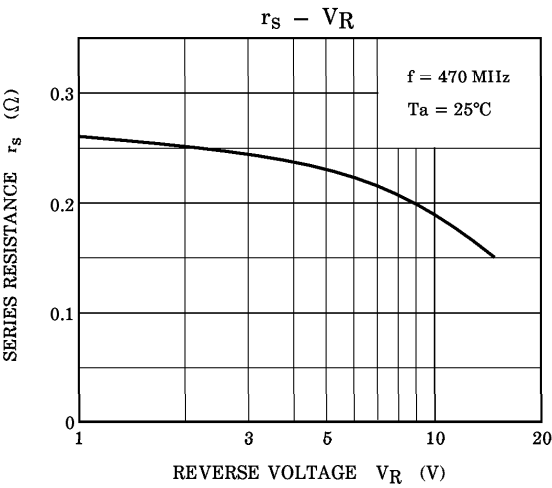
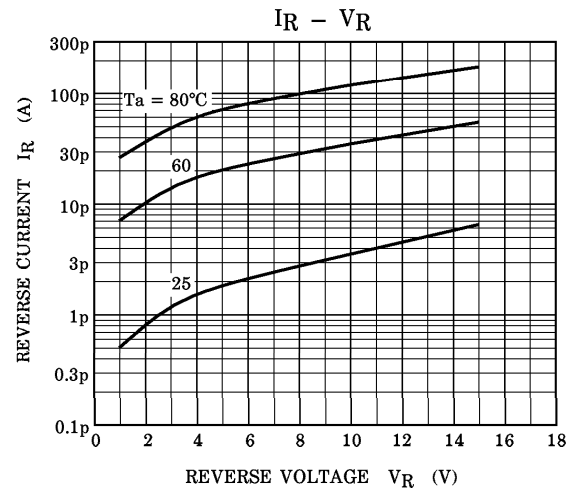
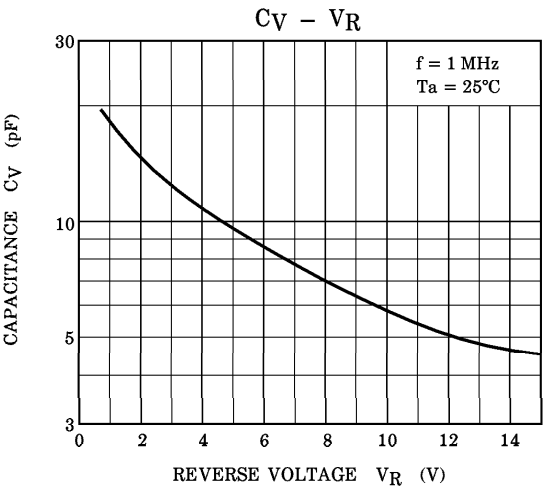
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX	UNIT
Reverse Voltage	V_R	$I_R = 1 \mu\text{A}$	15	—	—	V
Reverse Current	I_R	$V_R = 15 \text{ V}$	—	—	3	nA
Capacitance	C_{2V}	$V_R = 2 \text{ V}, f = 1 \text{ MHz}$	14	15	16	pF
Capacitance	C_{10V}	$V_R = 10 \text{ V}, f = 1 \text{ MHz}$	5.5	6	6.5	pF
Capacitance Ratio	C_{2V}/C_{10V}	—	2	2.5	—	—
Series Resistance	r_s	$V_R = 5 \text{ V}, f = 470 \text{ MHz}$	—	0.2	0.4	Ω

MARKING



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(Note) : $\delta C (\%) = \frac{C(T_a) - C(25)}{C(25)} \times 100$