

TOSHIBA

1SV306

TENTATIVE TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV306

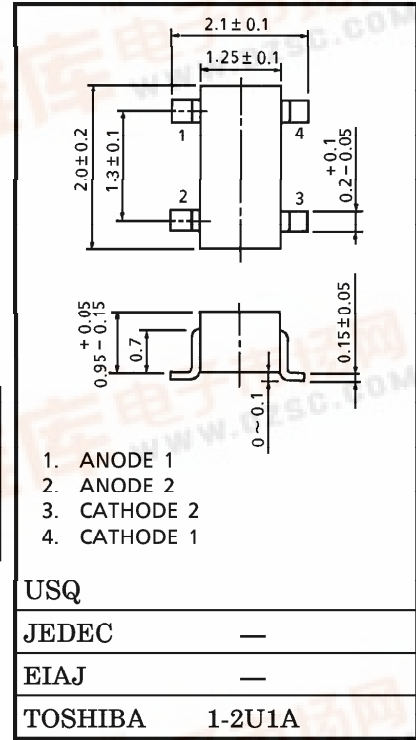
VCO FOR UHF BAND RADIO

Unit in mm

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

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATIN	UNIT
Reverse Voltage	V_R	15	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55~125	°C

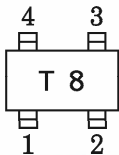


Weight : 0.006g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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

MARKING



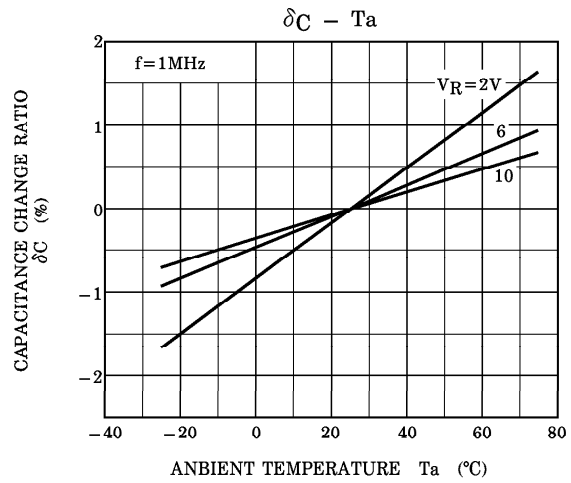
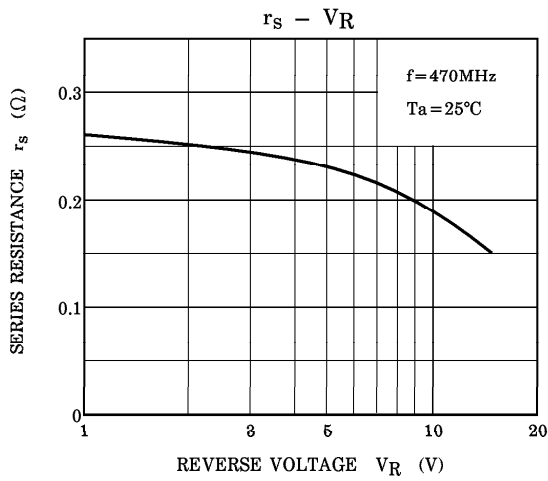
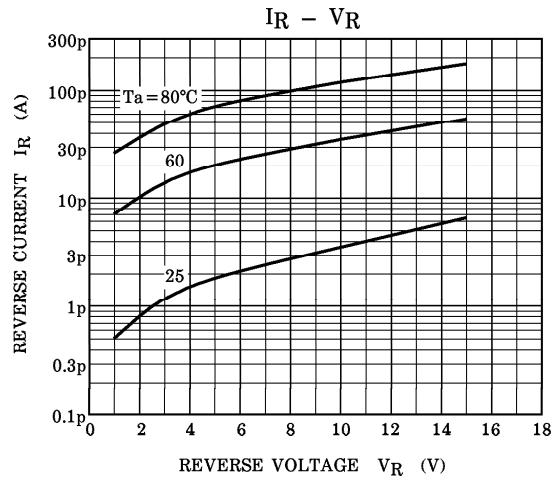
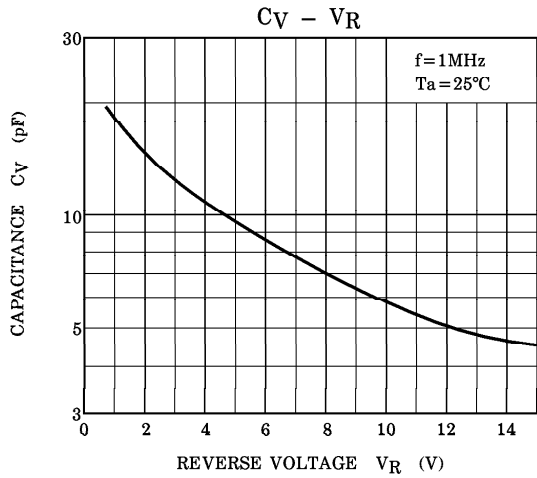
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Note :
$$\delta C (\%) = \frac{C(T_a) - C(25)}{C(25)} \times 100$$