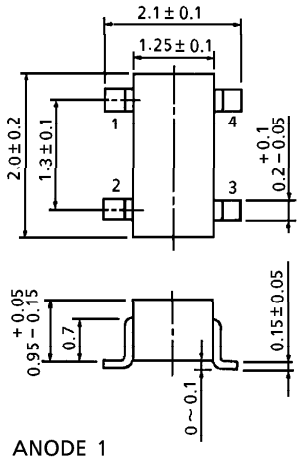
TENTATIVE TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV306

VCO FOR UHF BAND RADIO

Unit in mm

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



1. ANODE 1
2. ANODE 2
3. CATHODE 2
4. CATHODE 1

USQ	
JEDEC	—
EIAJ	—
TOSHIBA	1-2U1A

Weight : 0.006g

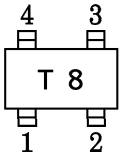
MAXIMUM RATINGS (Ta = 25°C)

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

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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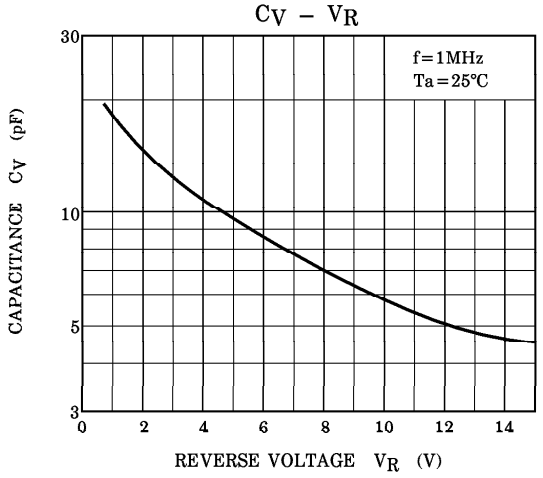
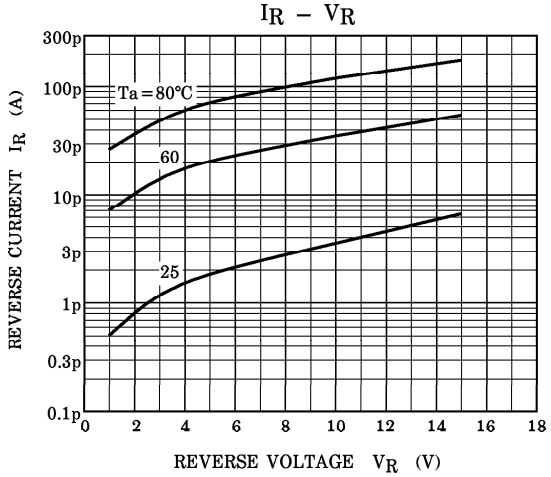
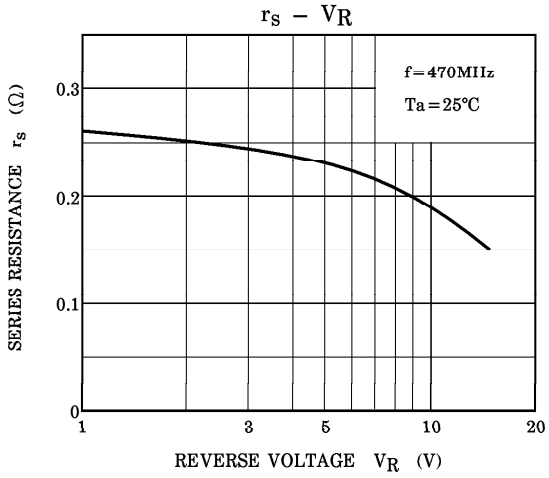
$C_V - V_R$



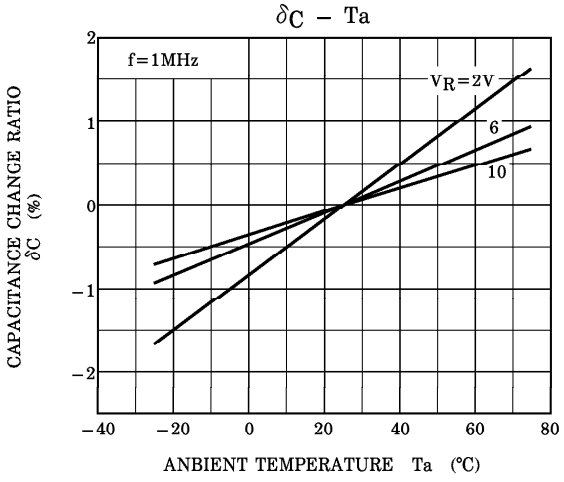
$I_R - V_R$



$r_s - V_R$



$\delta C - Ta$



Note : $\delta_C(\%) = \dfrac{C(Ta) - C(25)}{C(25)} \times 100$