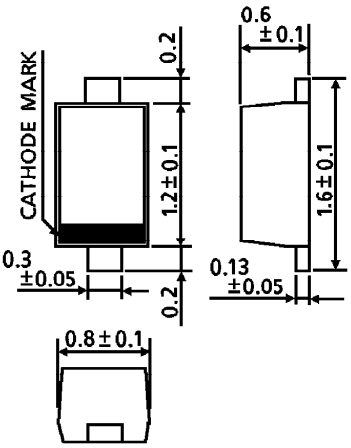
TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV281

VCO FOR V/UHF BAND RADIO

Unit in mm

- High Capacitance Ratio : $C_{1V}/C_{4V}=2.0$ (TYP.)
- Low Series Resistance : $r_s=0.28\Omega$ (TYP.)
- Useful for Small Size Tuner.



JEDEC	—
EIAJ	—
TOSHIBA	1-1G1A

Weight : 0.0014g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	10	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C

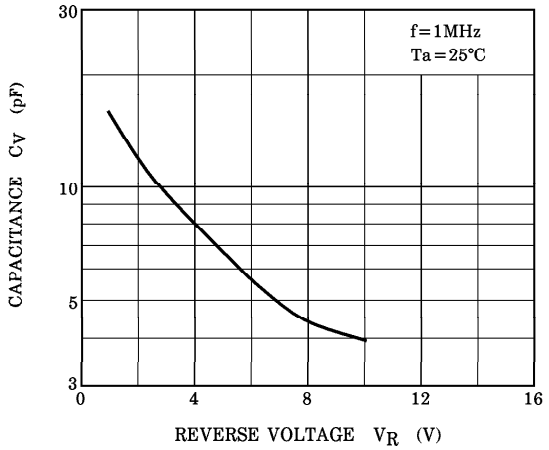
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R=1\mu A$	10	—	—	V
Reverse Current	I_R	$V_R=10V$	—	—	3	nA
Capacitance	C_{1V}	$V_R=1V$, f=1MHz	15	—	17	pF
Capacitance	C_{4V}	$V_R=4V$, f=1MHz	7.3	—	8.7	pF
Capacitance Ratio	C_{1V}/C_{4V}	—	1.8	2.0	—	—
Series Resistance	r_s	$V_R=1V$, f=470MHz	—	0.28	0.5	Ω

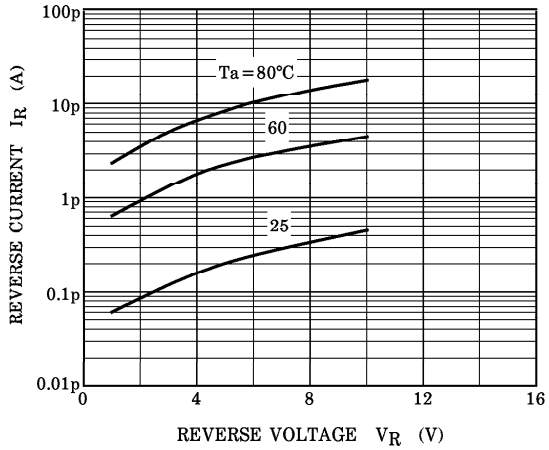
MARKING

961001EAA2

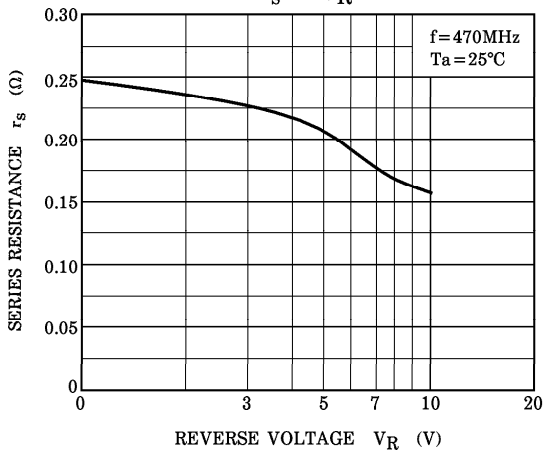
$C_V - V_R$



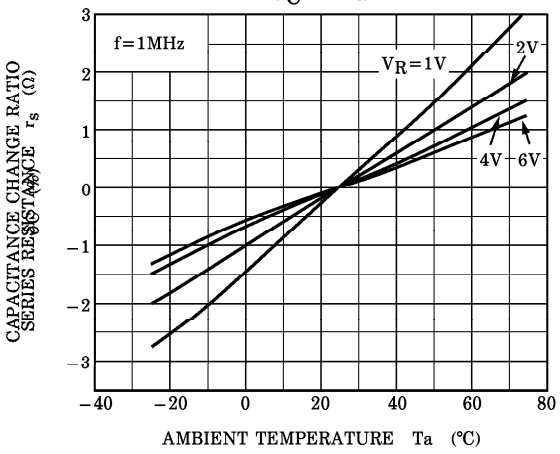
$I_R - V_R$



$r_s - V_R$



$\delta C - Ta$



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