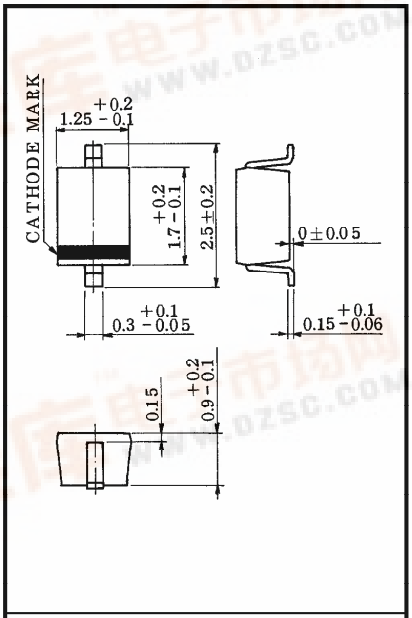
TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV216

TV VHF UHF TUNER AFC

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	1-1E1A

Weight : 0.004g

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	30	V
Peak Reverse Voltage	V_{RM}	35 (R_L = 10kΩ)	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	−55~125	°C

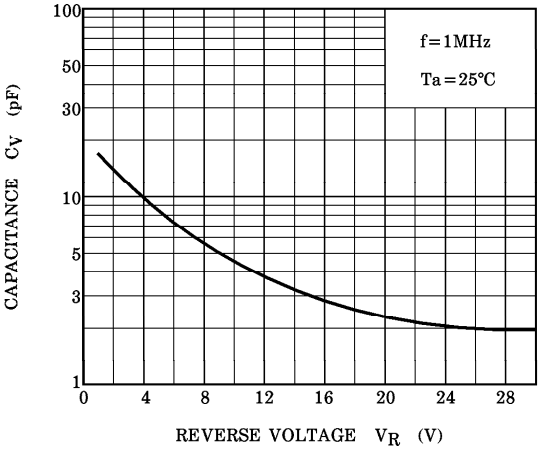
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	I_R = 1μA	30	—	—	V
Reverse Current	I_R	V_R = 28V	—	—	10	nA
Capacitance	C_{2V}	V_R = 2V, f = 1MHz	10.5	—	16	pF
Capacitance	C_{10V}	V_R = 10V, f = 1MHz	3.3	—	5.7	pF
Capacitance Ratio	C_{2V} / C_{10V}	—	2.5	—	3.4	—
Series Resistance	r_s	V_R = 5V, f = 470MHz	—	0.55	1.2	Ω

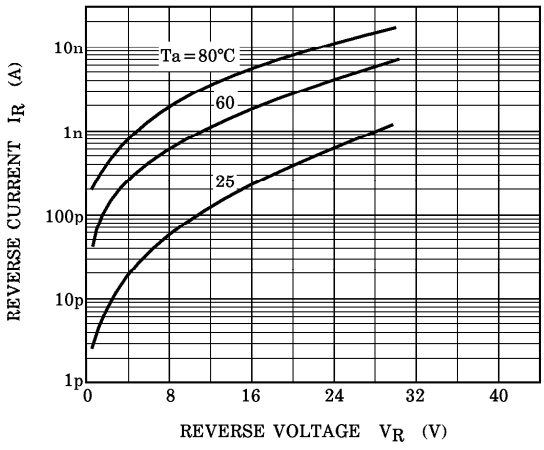
Marking

961001EAA2

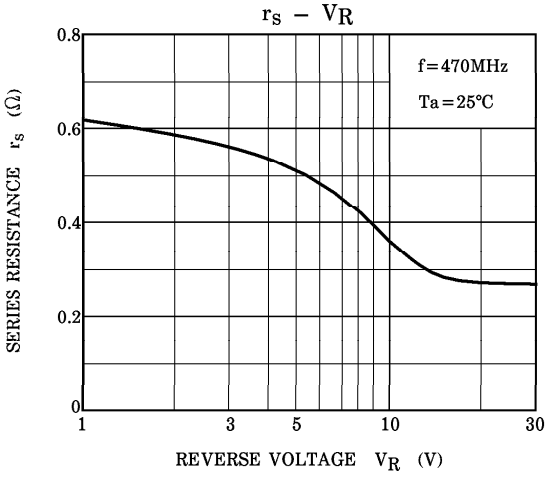
$C_V - V_R$



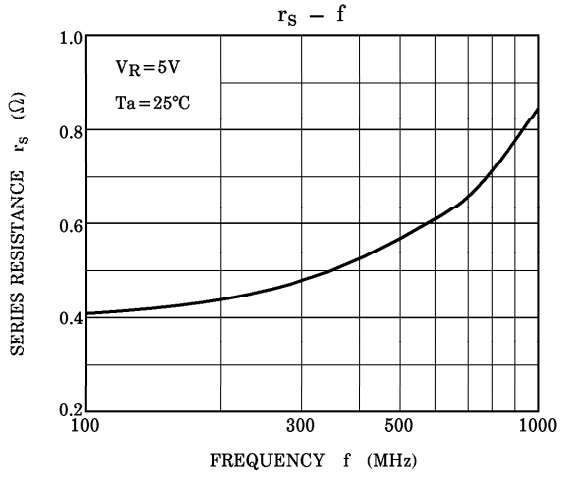
$I_R - V_R$



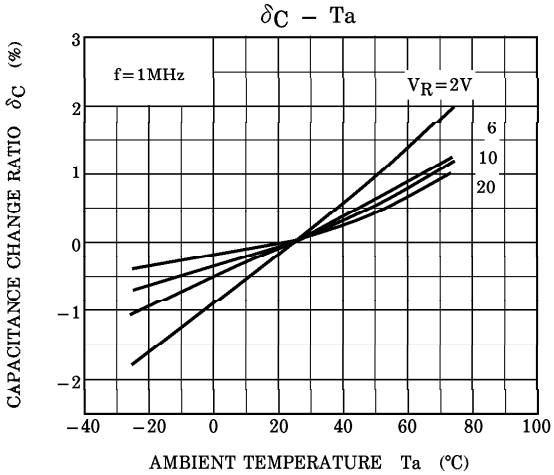
$r_s - V_R$



$r_s - f$



$\delta C - Ta$



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