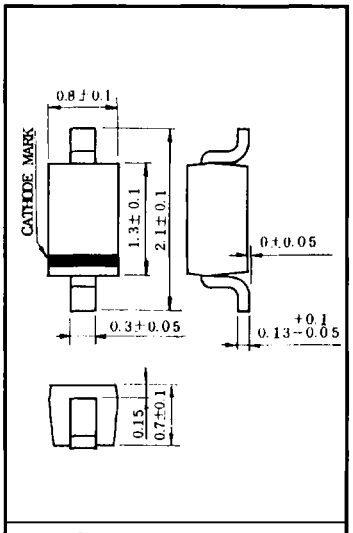
1SV261

SILICON EPITAXIAL PLANAR TYPE
VARIABLE CAPACITANCE DIODE

UHF SHF TUNING

- High Capacitance Ratio : C2V / C25V = 5.7 (Typ.)
- Low Series Resistance : rs = 1.2Ω (Typ.)
- Excellent C-V Characteristics, and Small Tracking Error.

Unit in mm



JEDEC	—
EIAJ	—
TOSHIBA	1-1F1A

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

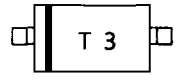
ELECTRICAL CHARACTERISTICS (Ta = 25°C)

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	C2V	V_R = 2V, f = 1MHz	3.31	—	4.55	pF
Capacitance	C25V	V_R = 25V, f = 1MHz	0.61	—	0.77	pF
Capacitance Ratio	C2V / C25V	—	5.0	5.7	6.5	—
Series Resistance	r_s	V_R = 1V, f = 470MHz	—	1.2	2.0	Ω

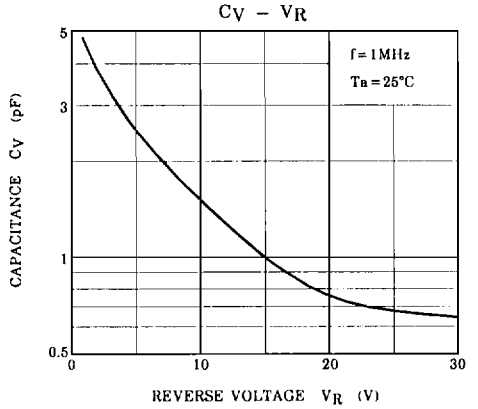
Note 1 : Unites are compounded in one package and are matched to 6.0%.

$$\frac{C(Max.) - C(Min.)}{C(Min.)} \leqq 0.06 \quad (VR = 2 \sim 25V)$$

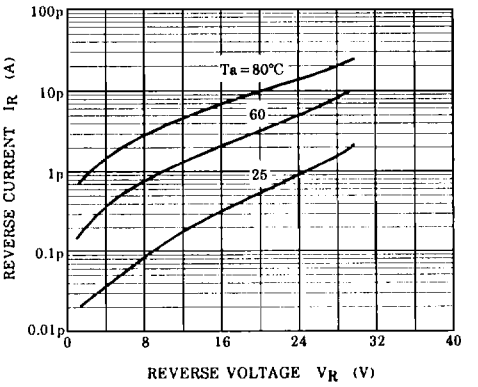
Marking



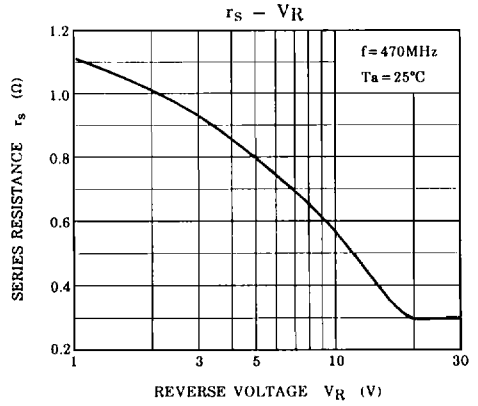
$C_V - V_R$



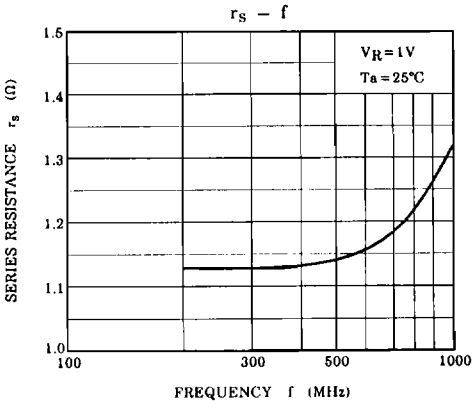
$I_R - V_R$



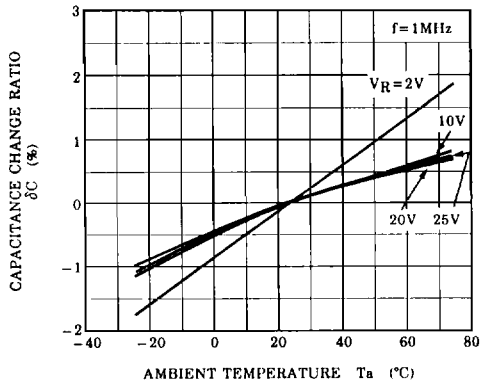
$r_S - V_R$



$r_S - f$



$\delta C - Ta$



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