

TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

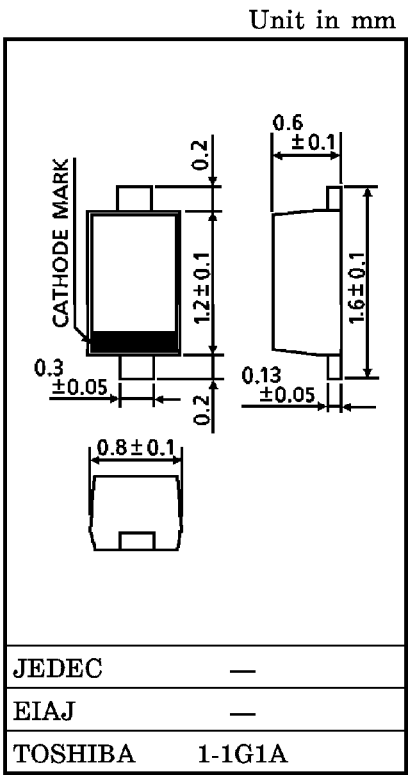
1SV278

TV TUNING

- High Capacitance Ratio :  $C_{2V}/C_{25V}=6.5$  (TYP.)
- Low Series Resistance :  $r_s=0.4\Omega$  (TYP.)
- Excellent C-V Characteristics, and Small Tracking Error.
- Useful for Small Size Tuner.

MAXIMUM RATINGS (Ta = 25°C)

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



Weight : 0.0014g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$V_R$	$I_R=1\mu A$	30	—	—	V
Reverse Current	$I_R$	$V_R=28V$	—	—	10	nA
Capacitance	$C_{2V}$	$V_R=2V, f=1MHz$	14.16	—	16.25	pF
Capacitance	$C_{25V}$	$V_R=25V, f=1MHz$	2.11	—	2.43	pF
Capacitance Ratio	$C_{2V}/C_{25V}$	—	5.90	6.50	7.15	—
Series Resistance	$r_s$	$V_R=5V, f=470MHz$	—	0.4	0.55	$\Omega$

Note 1 : Available in matched group for capacitance to 2.5%.

$$\frac{C (MAX.) - C (MIN.)}{C (MIN.)} \leq 0.025$$

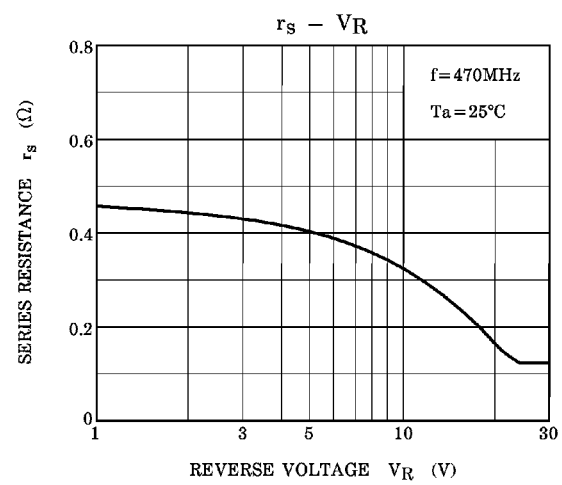
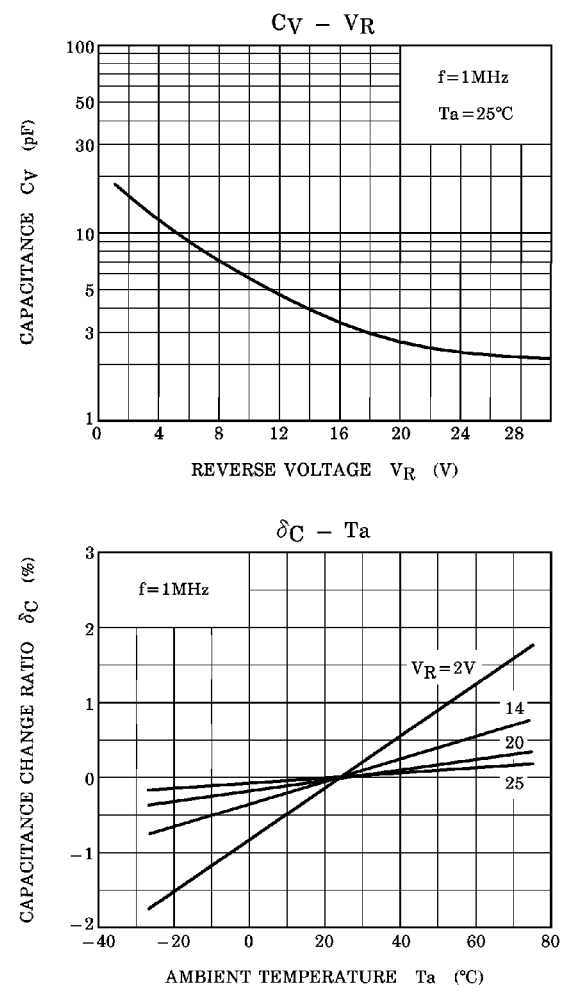
( $V_R=2\sim 25V$ )

MARKING



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