

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09366 DT-07-19

Silicon Epitaxial Planar Type
Variable Capacitance Diode

1SV123

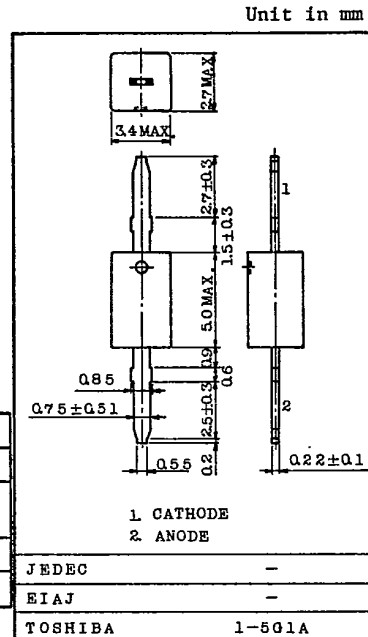
TV TUNER, VHF UHF BAND ELECTRONIC TUNING APPLICATIONS.

FEATURES:

- High Capacitance Ratio : C3V/C25V=5.3 (Typ.)
- Low Series Resistance : $r_s=0.45\Omega$ (Typ.)

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V _R	30	V
Peak Reverse Voltage	V _{RM}	35 (RL=10kΩ)	V
Junction Temperature	T _j	125	°C
Storage Temperature Range	T _{stg}	-55 ~ 125	°C



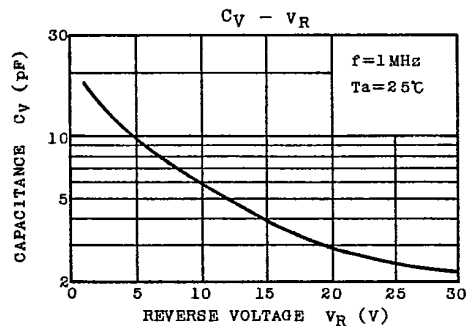
ELECTRICAL CHARACTERISTICS (Ta=25°C)

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	C3V	V _R =3V, f=1MHz	12.04	-	13.63	pF
Capacitance	C25V	V _R =25V, f=1MHz	2.172	-	2.454	pF
Capacitance Ratio	C3V/C25V		4.95	-	6.05	
Series Resistance	r _s	C=9pF, f=470MHz	-	-	0.6	Ω

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

$$\frac{C(\text{Max.}) - C(\text{Min.})}{C(\text{Min.})} \leq 0.025$$

(V_R=3V ~ 25V)



TOSHIBA CORPORATION