

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09374 DT-07-19

Silicon Epitaxial Planar Type  
Variable Capacitance Diode

# 1SV153

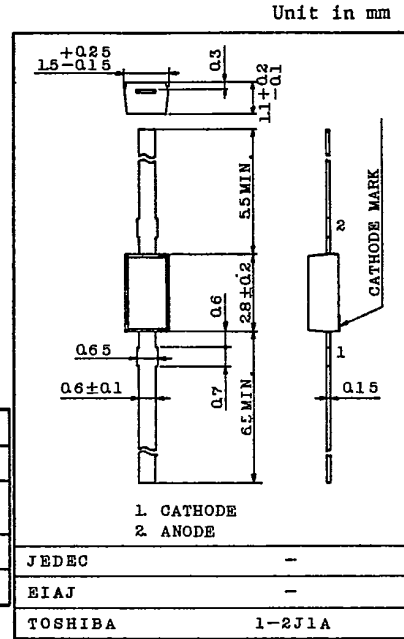
TV TUNING.

**FEATURES:**

- High Capacitance Ratio :  $C_{2V}/C_{25V}=6.5$  (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 ( $RL=10k\Omega$ )	V
Junction Temperature	$T_j$	125	°C
Storage Temperature Range	$T_{stg}$	-55 ~ 125	°C



**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

Weight : 0.02g

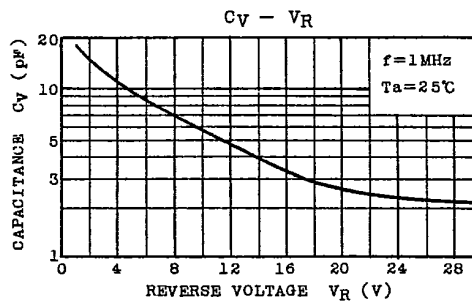
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	$V_R$	$I_R=1\mu A$	30	-	-	V
Reverse Current	$I_R$	$V_R=28V$	-	-	10	nA
Capacitance	$C_{2V}$	$V_R=2V, f=1MHz$	14.16	-	16.25	pF
Capacitance	$C_{25V}$	$V_R=25V, f=1MHz$	2.11	-	2.43	pF
Capacitance Ratio	$C_{2V}/C_{25V}$	-	5.90	-	7.15	
Series Resistance	$r_s$	$C=9pF, f=470MHz$	-	-	0.6	$\Omega$

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

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

( $V_R=2 \sim 25V$ )

CATHODE MARK: RED



TOSHIBA CORPORATION