

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09374 DT-07-19

Silicon Epitaxial Planar Type
Variable Capacitance Diode

1SV153

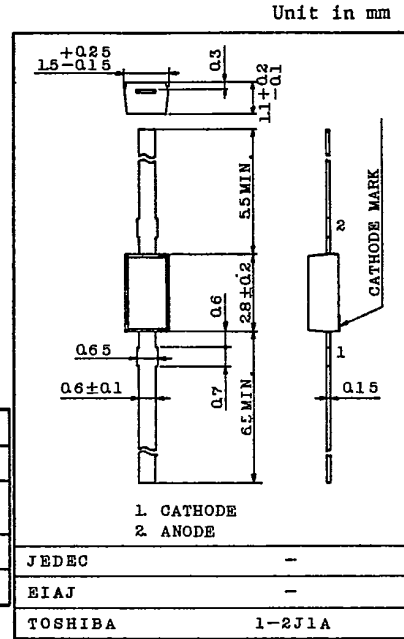
TV TUNING.

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 ($R_L=10k\Omega$)	V
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	-55 ~ 125	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C)

Weight : 0.02g

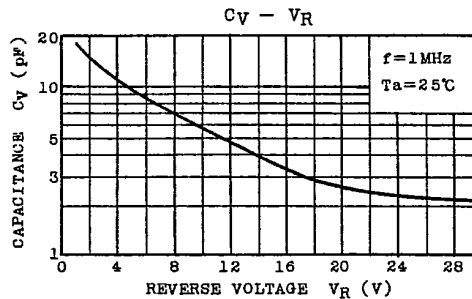
CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R=1\mu A$	30	-	-	V
Reverse Current	I_R	$V_R=28V$	-	-	10	nA
Capacitance	C_{2V}	$V_R=2V, f=1MHz$	14.16	-	16.25	pF
Capacitance	C_{25V}	$V_R=25V, f=1MHz$	2.11	-	2.43	pF
Capacitance Ratio	C_{2V}/C_{25V}	-	5.90	-	7.15	
Series Resistance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

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

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

($V_R=2 \sim 25V$)

CATHODE MARK: RED



TOSHIBA CORPORATION