

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09377

DT-07-19

1SV161

Silicon Epitaxial Planar Type

Variable Capacitance Diode

TENTATIVE

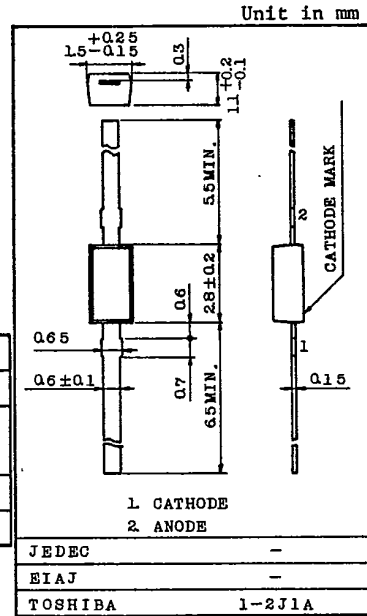
CATV TUNING.

FEATURES:

- High Capacitance Ratio : $C_{2V}/C_{25V}=10.5$ (Typ.)
- Low Series Resistance : $r_s=0.6\Omega$ (Typ.)

MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

| 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 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -55 ~ 125 | $^\circ\text{C}$ |



ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------|------------------|----------------------------------|------|------|------|----------|
| Reverse Voltage | V_R | $I_R=1\mu\text{A}$ | 30 | - | - | V |
| Reverse Current | I_R | $V_R=28\text{V}$ | - | - | 10 | nA |
| Capacitance | C_{2V} | $V_R=2\text{V}, f=1\text{MHz}$ | 26 | - | 32 | pF |
| Capacitance | C_{25V} | $V_R=25\text{V}, f=1\text{MHz}$ | 2.5 | - | 3.2 | pF |
| Capacitance Ratio | C_{2V}/C_{25V} | - | 9.5 | 10.5 | - | |
| Series Resistance | r_s | $V_R=5\text{V}, f=470\text{MHz}$ | - | 0.6 | 0.8 | Ω |

Weight : 0.02g

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

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

($V_R=2 \sim 25\text{V}$)

CATHODE MARK: YELLOW

