TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

SV103

FM RADIO BAND TUNING APPLICATIONS.

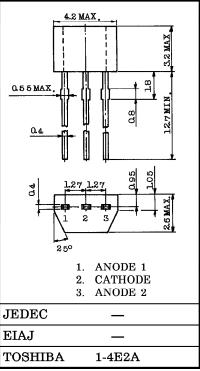
Low Series Resistance : $r_s = 0.35\Omega$ (Typ.)

Small Package.

MAXIMUM RATINGS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | RATING | UNIT |
|---------------------------|--------------------|---------|----------------------|
| Reverse Voltage | $ m V_{R}$ | 32 | V |
| Junction Temperature | $\mathrm{T_{j}}$ | 125 | $^{\circ}\mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T_{stg}}$ | -55~125 | $^{\circ}\mathrm{C}$ |

Unit in mm

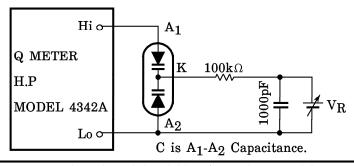


Weight: 0.13g

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| CHARACTERISTIC | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------|------------------|---------------------------|------|------|------|------|
| Reverse Voltage | $v_{ m R}$ | $I_R = 10 \mu A$ | 32 | _ | _ | V |
| Reverse Current | ${ m I}_{ m R}$ | $V_{ m R}$ = 30 V | _ | _ | 50 | nA |
| Capacitance | c_{3V} | V_R =3 V , f=1 M Hz | 37 | _ | 42 | рF |
| Capacitance | c_{30V} | V_R =30V, f=1MHz | 13.2 | _ | 16.2 | pF |
| Capacitance Ratio | C_{3V}/C_{30V} | 1 | 2.6 | _ | 2.9 | |
| Series Resistance | $ m r_{s}$ | C=20pF, $f=50MHz$ (Note) | ı | 0.35 | 0.60 | Ω |

Note: r_S Test circuit



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