

TOSHIBA Diode    Silicon Epitaxial Planar Type

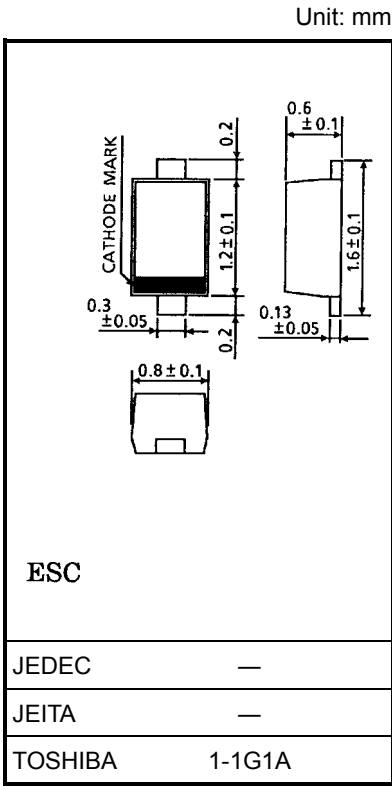
1SV329

VCO for UHF Band Radio

- High capacitance ratio:  $C_1 \text{ V}/C_4 \text{ V} = 2.8$  (typ.)
- Low series resistance:  $r_s = 0.55 \text{ } \Omega$  (typ.)
- Useful for small size tuner.

Maximum Ratings (Ta = 25°C)

| Characteristics           | Symbol    | Rating  | Unit |
|---------------------------|-----------|---------|------|
| Reverse voltage           | $V_R$     | 10      | V    |
| Junction temperature      | $T_j$     | 125     | °C   |
| Storage temperature range | $T_{stg}$ | -55~125 | °C   |



Electrical Characteristics (Ta = 25°C)

Weight: 0.0014 g (typ.)

| Characteristics   | Symbol                        | Test Condition                           | Min  | Typ. | Max  | Unit     |
|-------------------|-------------------------------|------------------------------------------|------|------|------|----------|
| Reverse voltage   | $V_R$                         | $I_R = 1 \text{ } \mu\text{A}$           | 10   | —    | —    | V        |
| Reverse current   | $I_R$                         | $V_R = 10 \text{ V}$                     | —    | —    | 3    | nA       |
| Capacitance       | $C_1 \text{ V}$               | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$   | 5.7  | —    | 6.7  | pF       |
| Capacitance       | $C_4 \text{ V}$               | $V_R = 4 \text{ V}, f = 1 \text{ MHz}$   | 1.85 | —    | 2.45 | pF       |
| Capacitance ratio | $C_1 \text{ V}/C_4 \text{ V}$ | —                                        | 2.7  | 2.8  | —    | —        |
| Series resistance | $r_s$                         | $V_R = 1 \text{ V}, f = 470 \text{ MHz}$ | —    | 0.55 | 0.7  | $\Omega$ |

Note: Signal level when capacitance is measured:  $V_{sig} = 100 \text{ mVrms}$

Marking

