

TOSHIBA Diode Silicon Epitaxial Planar Type

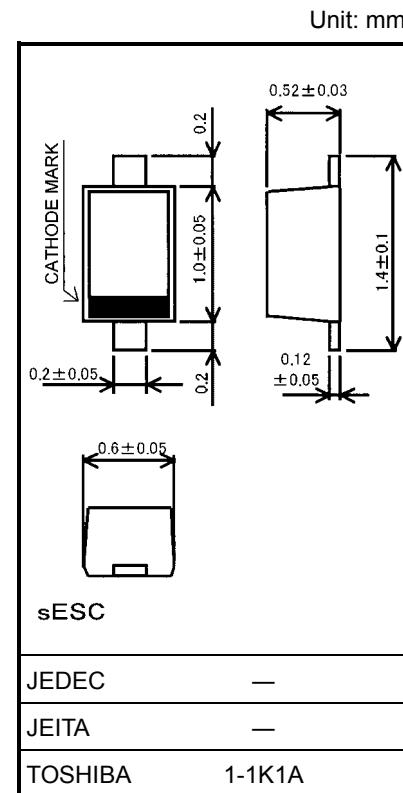
**JDS2S03S**

## VHF Tuner Band Switch Applications

- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Small total capacitance:  $C_T = 0.7 \text{ pF}$  (typ.)
- Low series resistance:  $r_s = 0.6 \Omega$  (typ.)

**Maximum Ratings ( $T_a = 25^\circ\text{C}$ )**

| Characteristics           | Symbol    | Rating  | Unit             |
|---------------------------|-----------|---------|------------------|
| Reverse voltage           | $V_R$     | 30      | V                |
| Forward current           | $I_F$     | 100     | mA               |
| Junction temperature      | $T_j$     | 150     | $^\circ\text{C}$ |
| Storage temperature range | $T_{stg}$ | -55~150 | $^\circ\text{C}$ |



Weight: 0.0011 g

**Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )**

| Characteristics   | Symbol | Test Condition                            | Min | Typ. | Max  | Unit          |
|-------------------|--------|---|-----|------|------|---------------|
| Forward voltage   | $V_F$  | $I_F = 2 \text{ mA}$                      | —   | —    | 0.85 | V             |
| Reverse current   | $I_R$  | $V_R = 15 \text{ V}$                      | —   | —    | 0.1  | $\mu\text{A}$ |
| Reverse voltage   | $V_R$  | $I_R = 1 \mu\text{A}$                     | 30  | —    | —    | V             |
| Total capacitance | $C_T$  | $V_R = 6 \text{ V}, f = 1 \text{ MHz}$    | —   | 0.7  | 1.2  | pF            |
| Series resistance | $r_s$  | $I_F = 2 \text{ mA}, f = 100 \text{ MHz}$ | —   | 0.6  | 0.9  | $\Omega$      |

Note: Signal level when capacitance is measured:  $V_{sig} = 20 \text{ mVrms}$ **Marking**