

TOSHIBA Diode Silicon Epitaxial Pin Type

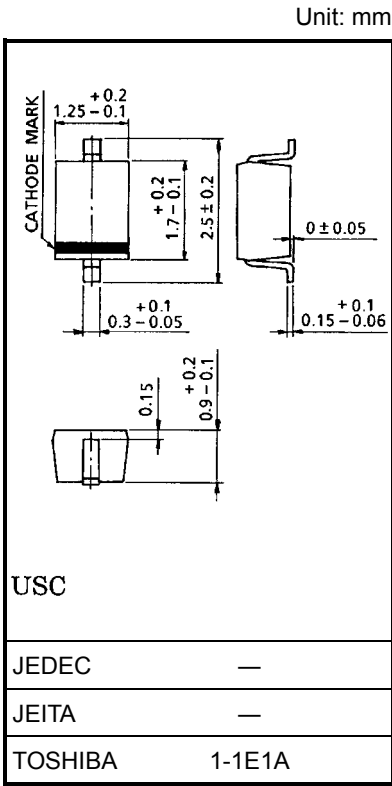
1SV307

VHF Tuner Band Switch Applications

- Small package
- Low series resistance:  $r_s = 1.1 \Omega$  (typ.)
- Small total capacitance:  $C_T = 0.3 \text{ pF}$  (typ.)

Maximum Ratings (Ta = 25°C)

| Characteristics           | Symbol    | Rating  | Unit |
|---------------------------|-----------|---------|------|
| Reverse voltage           | $V_R$     | 30      | V    |
| Forward current           | $I_F$     | 50      | mA   |
| Junction temperature      | $T_j$     | 125     | °C   |
| Storage temperature range | $T_{stg}$ | -55~125 | °C   |



Electrical Characteristics (Ta = 25°C)

Weight: 0.004 g (typ.)

| Characteristics   | Symbol | Test Condition                             | Min | Typ. | Max | Unit     |
|-------------------|--------|--------------------------------------------|-----|------|-----|----------|
| Reverse voltage   | $V_R$  | $I_R = 10 \mu A$                           | 30  | —    | —   | V        |
| Reverse current   | $I_R$  | $V_R = 30 \text{ V}$                       | —   | —    | 0.1 | $\mu A$  |
| Forward voltage   | $V_F$  | $I_F = 50 \text{ mA}$                      | —   | 0.95 | 1.0 | V        |
| Total capacitance | $C_T$  | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$     | —   | 0.3  | 0.5 | pF       |
| Series resistance | $r_s$  | $I_F = 10 \text{ mA}, f = 1.5 \text{ GHz}$ | —   | 1.1  | —   | $\Omega$ |

Marking

