

TOSHIBA Diode Silicon Epitaxial Pin Type

# 1SV312

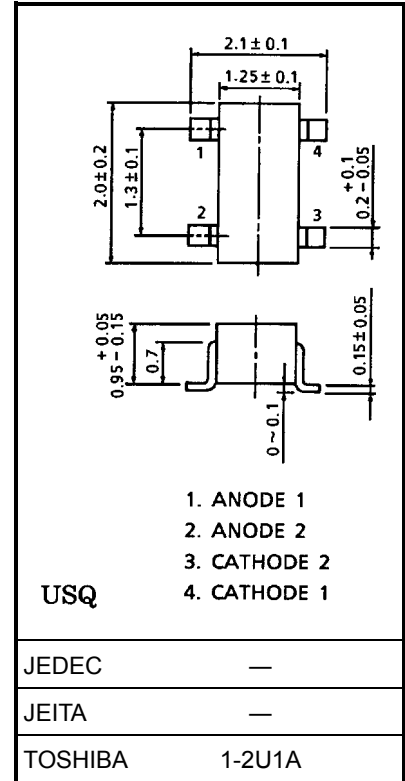
## VHF~UHF Band RF Attenuator Applications

- Two independent diodes mounted onto a 4-pin ultra compact package and it is suitable for high-density circuit design.
- Low capacitance:  $C_T = 0.25 \text{ pF}$  (typ.)
- Low series resistance:  $r_s = 3 \Omega$  (typ.)

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

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

Unit: mm

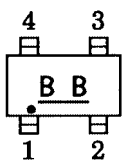


Weight: 0.006 g (typ.)

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

| Characteristics   | Symbol | Test Condition                             | Min | Typ. | Max | Unit          |
|-------------------|--------|--|-----|------|-----|---------------|
| Reverse voltage   | $V_R$  | $I_R = 10 \mu\text{A}$                     | 50  | —    | —   | V             |
| Reverse current   | $I_R$  | $V_R = 50 \text{ V}$                       | —   | —    | 0.1 | $\mu\text{A}$ |
| Forward voltage   | $V_F$  | $I_F = 50 \text{ mA}$                      | —   | 0.95 | 1   | V             |
| Total capacitance | $C_T$  | $V_R = 50 \text{ V}, f = 1 \text{ MHz}$    | —   | 0.25 | 0.4 | pF            |
| Series resistance | $r_s$  | $I_F = 10 \text{ mA}, f = 100 \text{ MHz}$ | —   | 3    | —   | $\Omega$      |

### Marking



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