

# JDP2S02S

## UHF~VHF Band RF Attenuator Applications

- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Low series resistance:  $r_s = 1.0 \Omega$  (typ.)
- Low capacitance:  $C_T = 0.3 \text{ pF}$  (typ.)

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

| Characteristics           | Symbol    | Rating  | Unit             |
|---------------------------|-----------|---------|------------------|
| Reverse voltage           | $V_R$     | 30      | V                |
| Forward current           | $I_F$     | 50      | mA               |
| Junction temperature      | $T_j$     | 150     | $^\circ\text{C}$ |
| Storage temperature range | $T_{stg}$ | -55~150 | $^\circ\text{C}$ |

Note: Using continuously under heavy loads (e.g. the application of high temperature/current/voltage and the significant change in temperature, etc.) may cause this product to decrease in the reliability significantly even if the operating conditions (i.e. operating temperature/current/voltage, etc.) are within the absolute maximum ratings.  
Please design the appropriate reliability upon reviewing the Toshiba Semiconductor Reliability Handbook ("Handling Precautions"/"Derating Concept and Methods") and individual reliability data (i.e. reliability test report and estimated failure rate, etc).

Unit: mm

|         |        |
|---------|--------|
| JEDEC   | —      |
| JEITA   | —      |
| TOSHIBA | 1-1K1A |

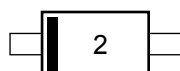
Weight: 0.0011 g (typ.)

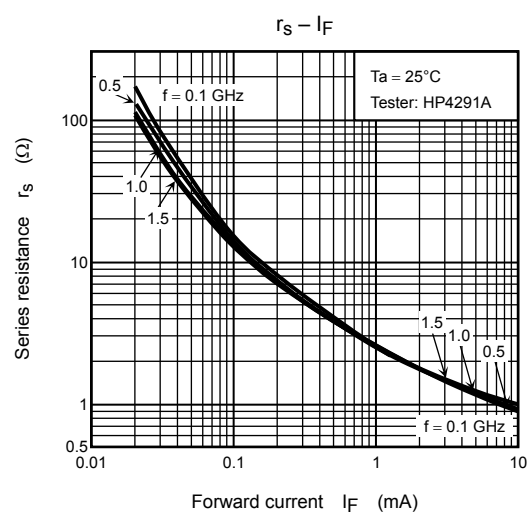
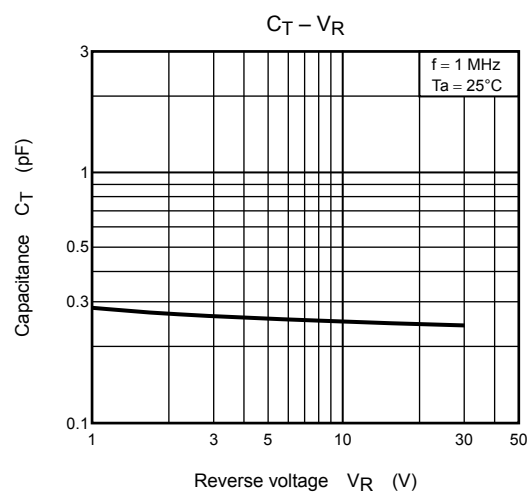
## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

| Characteristics   | Symbol | Test Condition                             | Min | Typ. | Max  | Unit          |
|-------------------|--------|--------------------------------------------|-----|------|------|---------------|
| Reverse voltage   | $V_R$  | $I_R = 10 \mu\text{A}$                     | 30  | —    | —    | V             |
| Reverse current   | $I_R$  | $V_R = 30 \text{ V}$                       | —   | —    | 0.1  | $\mu\text{A}$ |
| Forward voltage   | $V_F$  | $I_F = 50 \text{ mA}$                      | —   | 0.9  | 0.94 | V             |
| Capacitance       | $C_T$  | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$     | —   | 0.3  | 0.5  | pF            |
| Series resistance | $r_s$  | $I_F = 10 \text{ mA}, f = 100 \text{ MHz}$ | —   | 1.0  | 1.5  | $\Omega$      |

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

## Marking





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