

TOSHIBA Diode Silicon Epitaxial PIN Type

JDP2S02AFS

UHF~VHF Band RF Switch Applications

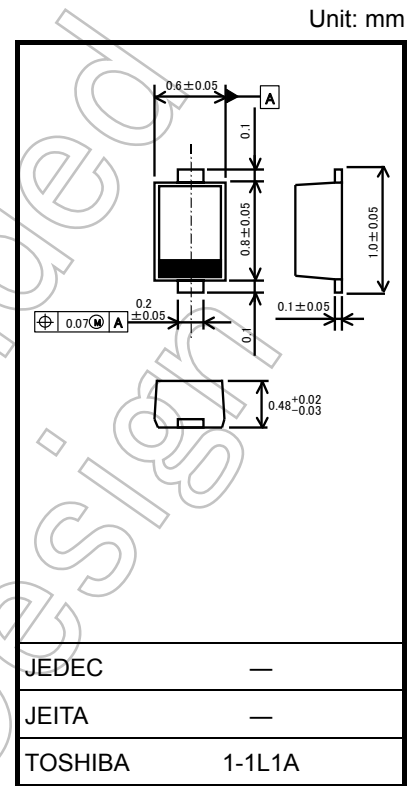
- Suitable for reducing set's size as a result from enabling high-density mounting due to 2-pin small packages.
- Low series resistance: $r_s = 1.0 \Omega$ (typ.)
- Low capacitance: $C_T = 0.3 \text{ pF}$ (typ.)

Absolute Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---------------------------|-----------|------------|------|
| Reverse voltage | V_R | 30 | V |
| Forward current | I_F | 50 | mA |
| Junction temperature | T_j | 150 | °C |
| Storage temperature range | T_{stg} | -55 to 150 | °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).



Weight: 0.0006 g (typ.)

Electrical Characteristics (Ta = 25°C)

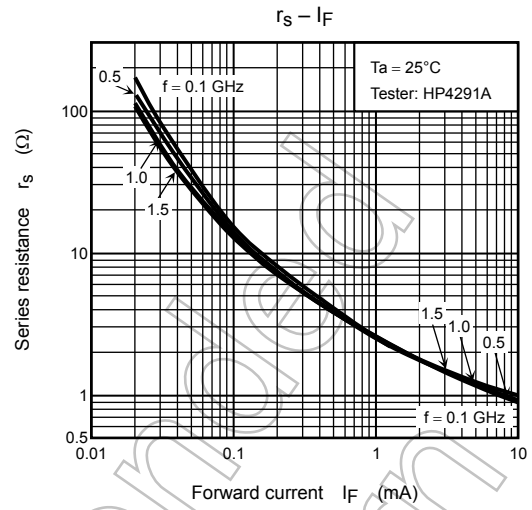
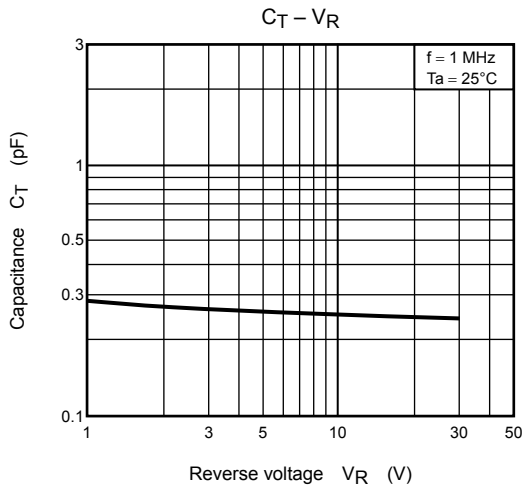
| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|-------------------|--------|--|-----|------|------|---------------|
| Reverse voltage | V_R | $I_R = 10 \mu\text{A}$ | 30 | — | — | V |
| Reverse current | I_R | $V_R = 30 \text{ V}$ | — | — | 0.1 | μA |
| Forward voltage | V_F | $I_F = 50 \text{ mA}$ | — | 0.9 | 0.94 | V |
| Capacitance | C_T | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$ | — | 0.3 | 0.4 | pF |
| Series resistance | r_s | $I_F = 10 \text{ mA}, f = 100 \text{ MHz}$ | — | 1.0 | 1.5 | Ω |

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

Marking



Start of commercial production
2002-12



Not Recommended for New Design

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