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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# JDH2S02FS

## UHF Band Mixer

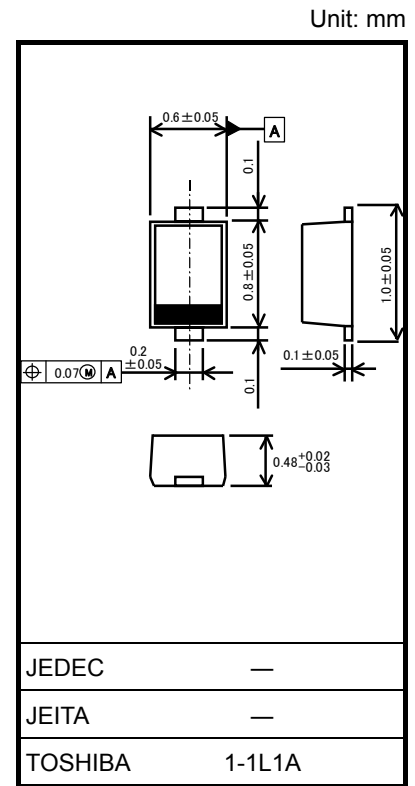
- Suitable for reducing set size through the use of a two-pin small package supporting high-density mounting

### Absolute Maximum Ratings (Ta = 25°C)

| Characteristic                 | Symbol    | Rating     | Unit |
|--------------------------------|-----------|------------|------|
| Maximum (peak) reverse voltage | $V_R$     | 10         | V    |
| Forward current                | $I_F$     | 10         | mA   |
| Junction temperature           | $T_j$     | 125        | °C   |
| Storage temperature range      | $T_{stg}$ | -55 to 125 | °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).

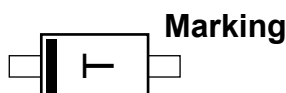


Weight: 0.0006 g (typ.)

### Electrical Characteristics (Ta = 25°C)

| Characteristic  | Symbol | Test Condition                           | Min | Typ. | Max | Unit |
|-----------------|--------|--|-----|------|-----|------|
| Forward voltage | $V_F$  | $I_F = 1 \text{ mA}$                     | —   | 0.24 | —   | V    |
| Forward current | $I_F$  | $V_F = 0.5 \text{ V}$                    | 2   | —    | —   | mA   |
| Reverse current | $I_R$  | $V_R = 0.5 \text{ V}$                    | —   | —    | 25  | μA   |
| Capacitance     | $C_T$  | $V_R = 0.2 \text{ V}, f = 1 \text{ MHz}$ | —   | 0.3  | —   | pF   |

Note: Signal level when capacitance is measured:  $V_{sig} = 20 \text{ mV}_{rms}$

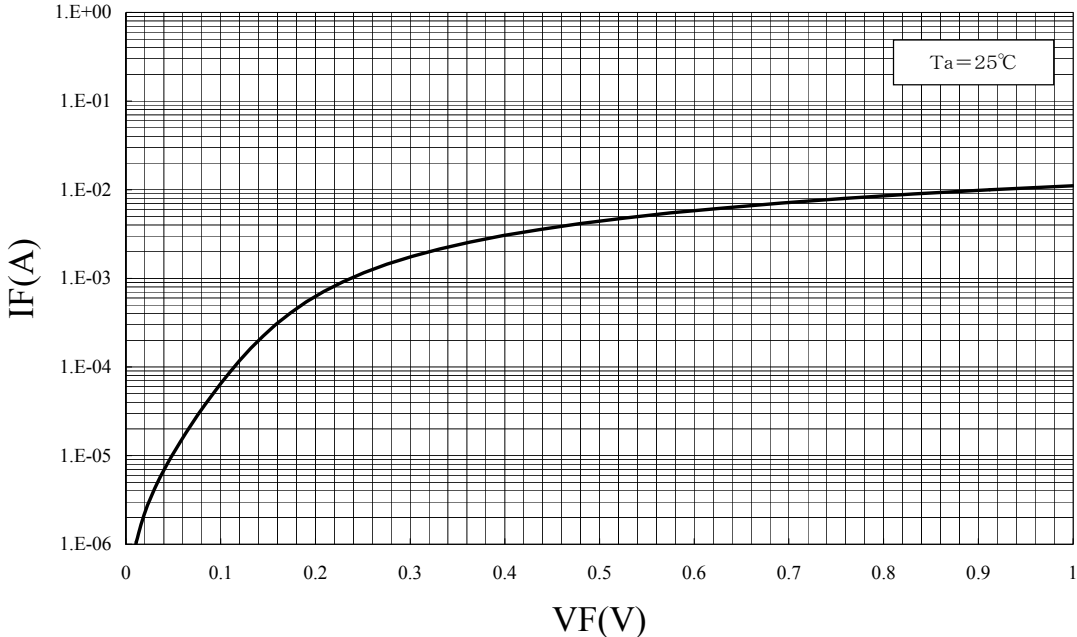


### Caution

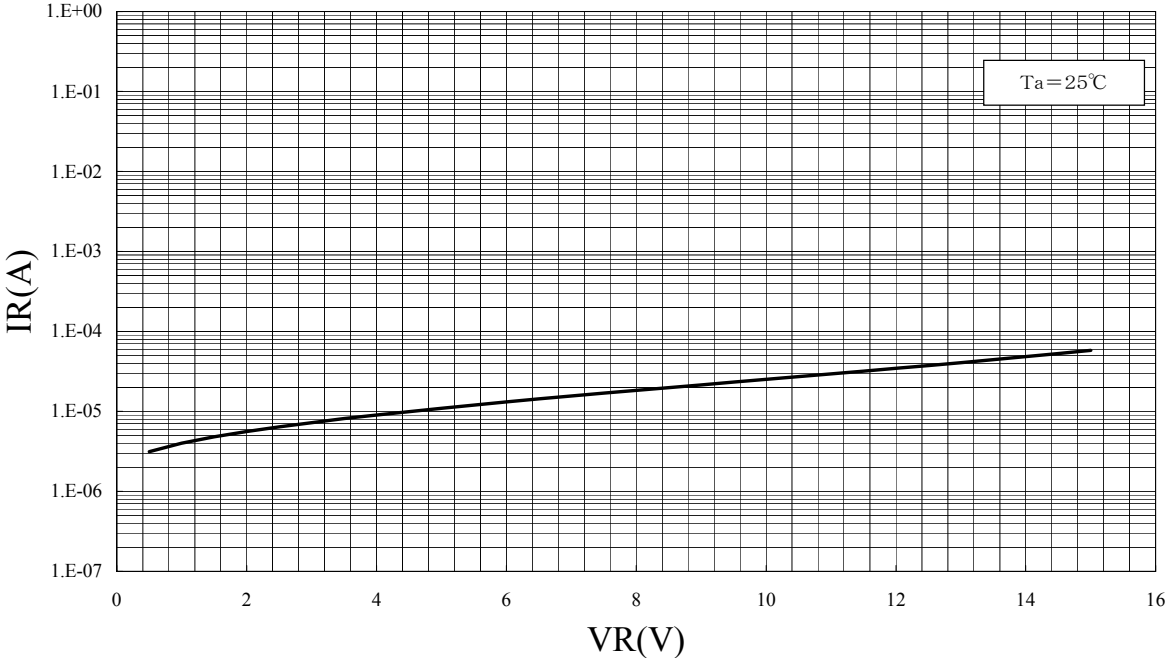
This device is sensitive to electrostatic discharge. Operators should wear antistatic clothing, and containers and other objects that come into direct contact with the product should be made of antistatic materials.

Start of commercial production  
2004-09

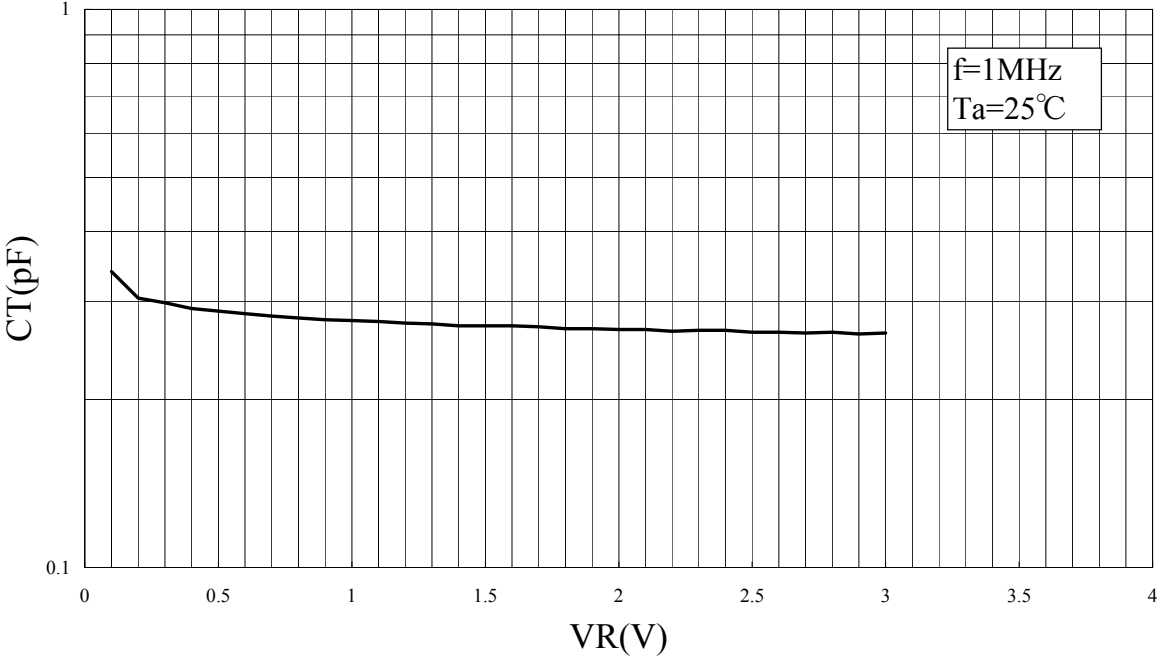
IF-VF



IR-VR



CT-VR



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