

1SS154

UHF~S Band Mixer/Detector Applications

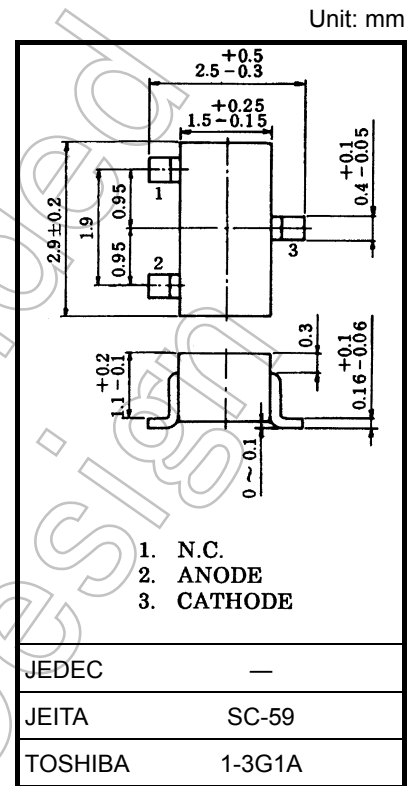
- Small package.

Absolute Maximum Ratings (Ta = 25°C)

| Characteristics | Symbol | Rating | Unit |
|---------------------------|-----------|------------|------|
| Reverse voltage | V_R | 6 | V |
| Forward current | I_F | 30 | mA |
| Junction temperature | T_j | 125 | °C |
| Storage temperature range | T_{stg} | -30 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).



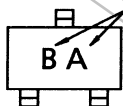
Weight: 12 mg (typ.)

Electrical Characteristics (Ta = 25°C)

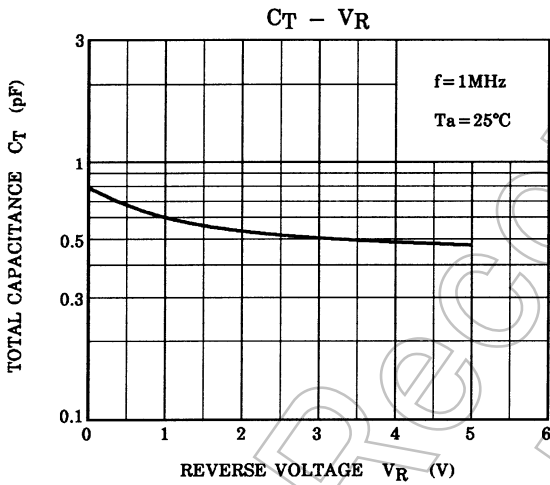
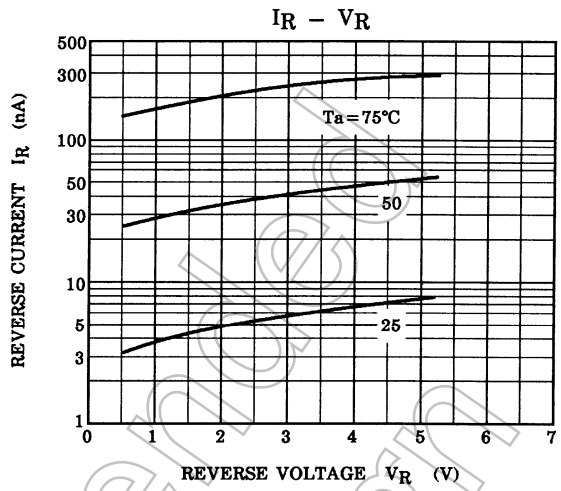
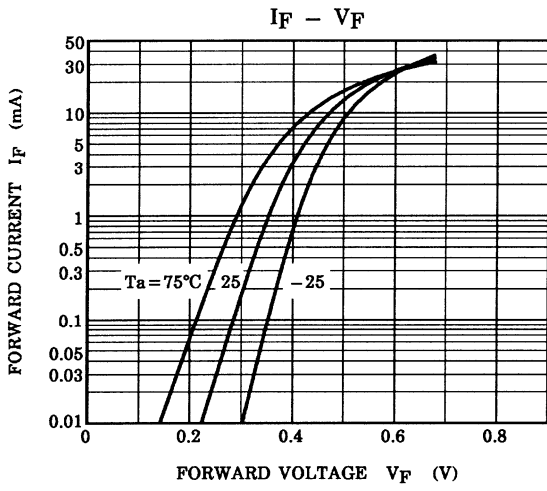
| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|-------------------|-----------|----------------------|-----|------|------|---------|
| Reverse voltage | V_R | $I_R = 10 \mu A$ | 6 | — | — | V |
| Reverse current | I_R | $V_R = 5 V$ | — | — | 0.5 | μA |
| Forward voltage | $V_F (1)$ | $I_F = 0.1 mA$ | — | — | 0.35 | V |
| Forward voltage | $V_F (2)$ | $I_F = 10 mA$ | — | 0.5 | — | V |
| Total capacitance | C_T | $V_R = 0, f = 1 MHz$ | — | 0.8 | — | pF |

Marking

Type Name



Start of commercial production
1981-01



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