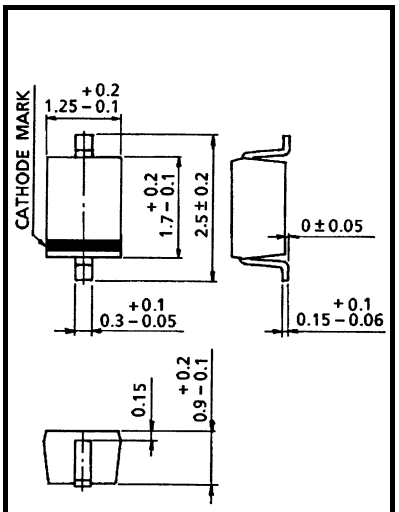
TOSHIBA Diode Silicon Epitaxial Schottky Barrier Type

# 1SS315

UHF Band Mixer Applications

Unit: mm




| | |
|---|---|
| JEDEC | — |
| JEITA | — |
| TOSHIBA | 1-1E1A |

Weight: 0.004 g (typ.)

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

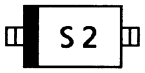
| Characteristics | Symbol | Rating | Unit |
|---|---|---|---|
| Maximum (peak) reverse voltage | $V_{RM}$ | 5 | V |
| Forward current | $I_F$ | 30 | mA |
| Junction temperature | $T_j$ | 125 | °C |
| Storage temperature range | $T_{stg}$ | −55~125 | °C |

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).

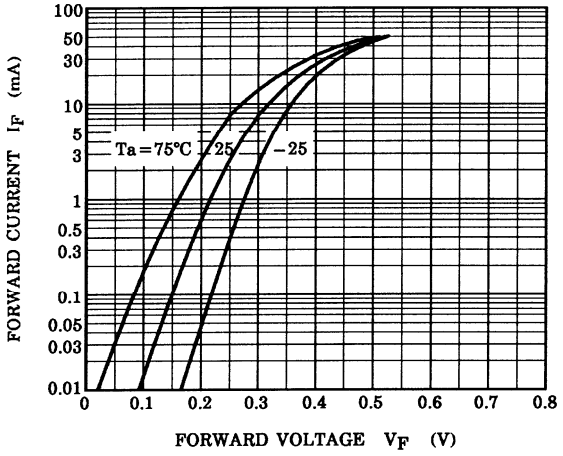
## Electrical Characteristics (Ta = 25°C)

| Characteristics | Symbol | Test Condition | Min | Typ. | Max | Unit |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | $I_F$ = 2 mA | — | 0.25 | — | V |
| Forward current | $I_F$ | $V_F$ = 0.5 V | 30 | — | — | mA |
| Reverse current | $I_R$ | $V_R$ = 0.5 V | — | — | 25 | μA |
| Total capacitance | $C_T$ | $V_R$ = 0.2 V, f = 1 MHz | — | 0.6 | — | pF |

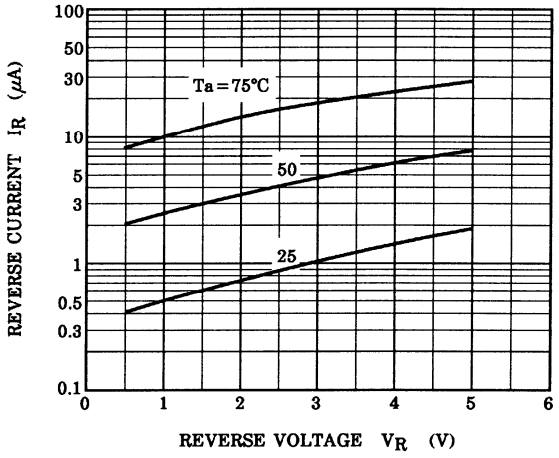
## Marking



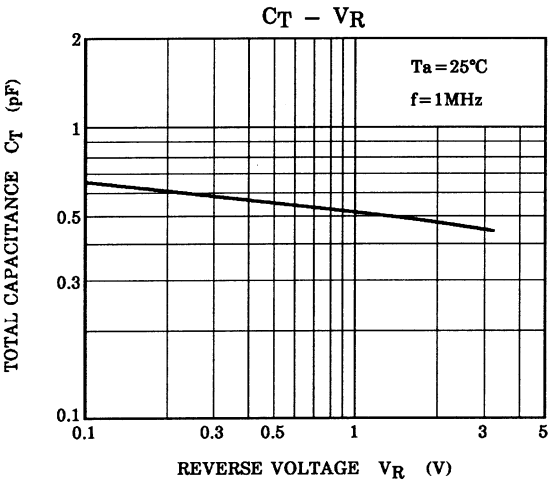
$I_F - V_F$




$I_R - V_R$




$C_T - V_R$



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