TOSHIBA Diode Silicon Epitaxial Planar Type

1SV311

VCO for UHF Band Radio

- High capacitance ratio: $C_{1V} / C_{4V} = 2.1$ (typ.)
- Low series resistance: $r_s = 0.28 \Omega$ (typ.)
- Useful for small size tuner

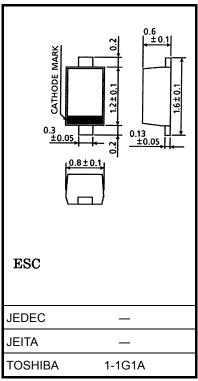
Absolute Maximum Ratings (Ta = 25°C)

Electrical Characteristics (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V _R	10	V
Junction temperature	Tj	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: 0.0014 g (typ.)

Characteristics Symbol **Test Condition** Min Max Unit Тур. V Reverse voltage V_{R} $I_R = 1 \ \mu A$ 10 ____ Reverse current V_R = 10 V ____ 3 nA I_R $V_R = 1 V, f = 1 MHz$ Capacitance C_{1V} 9.7 11.1 pF Capacitance V_R = 4 V, f = 1 MHz 4.45 5.45 pF C_{4V} Capacitance ratio C_{1V} / C_{4V} 2.1 1.8 0.28 Series resistance rs V_R = 1 V, f = 470 MHz 04 0

Marking

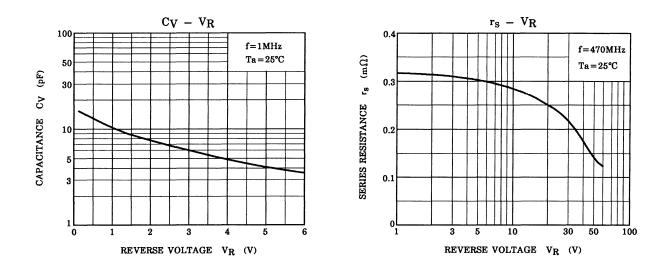


Start of commercial production 1998-02

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Unit: mm

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