Unit: mm

TOSHIBA Diode Silicon Epitaxial Planar Type

1SV325

TCXO/VCO

• High capacitance ratio: $C_{1V} / C_{4V} = 4.3$ (typ.)

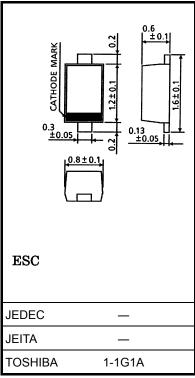
- Low series resistance: $r_s = 0.4 \Omega$ (typ.)
- Useful for small size tuner.

Absolute Maximum Ratings (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.)

Electrical Characteristics (Ta = 25°C)

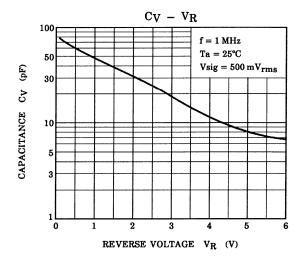
Characteristics	Symbol	Test Condition	Min	Тур.	Max	Unit
Reverse voltage	V_{R}	$I_R = 1 \mu A$	10	_	_	V
Reverse current	I _R	V _R = 10 V	_	_	3	nA
Capacitance	C _{1V}	V _R = 1 V, f = 1 MHz	44	_	49.5	pF
Capacitance	C _{4V}	V _R = 4 V, f = 1 MHz	9.2	_	12	pF
Capacitance ratio	C _{1V} / C _{4V}	_	4	4.3	_	_
Series resistance	r _S	V _R = 4 V, f = 100 MHz	_	0.4	0.8	Ω

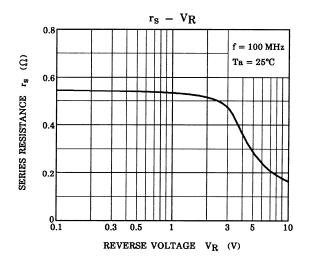
Note: Signal level when capacitance is measured: $V_{sig} = 500 \text{ mVfms}$

Marking



Start of commercial production 1999-03





2 2014-03-01

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