TOSHIBA Diode Silicon Epitaxial Planar Type

1SV314

VCO for UHF Band Radio

• High Capacitance Ratio : $C_{0.5V} / C_{2.5V} = 2.5$ (Typ.)

• Low Series Resistance : $r_s = 0.35 \Omega$ (Typ.)

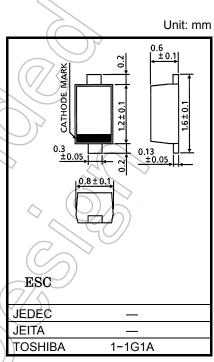
• Useful for Small Size Tuner

Absolute Maximum Ratings (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_{R}	10	V
Junction Temperature	Tj	125	(/c \
Storage Temperature Range	T _{stg}	-55 to 125	Ç

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:0.0014g (typ.)

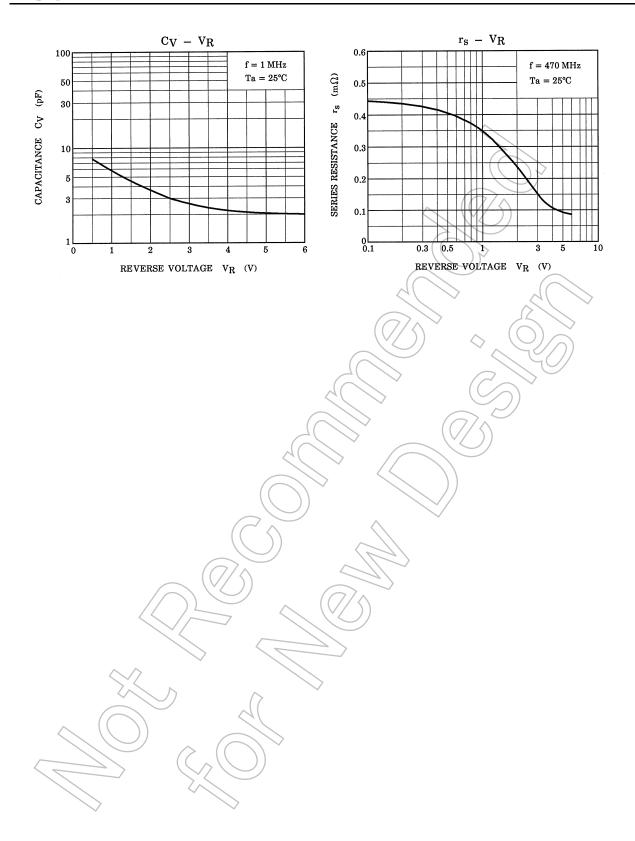
Electrical Characteristics (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP.	MAX	UNIT
Reverse Voltage	VR	I _R = 1µA	10	_	_	V
Reverse Current	IR	V _R = 10 V	_	_	3	nA
Capacitance	C _{0.5V}	V _R = 0.5 V, f = 1 MHz	7.3	_	8.4	pF
Capacitance	C _{2.5} V	V _R = 2.5 V, f = 1 MHz	2.75	_	3.4	pF
Capacitance Ratio	C _{0.5V} / C _{2.5V}	_	2.4	2.5	_	_
Series Resistance	rs	V _R = 1 V, f = 470 MHz		0.35	0.45	Ω

Marking



Start of commercial production 1998-06



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