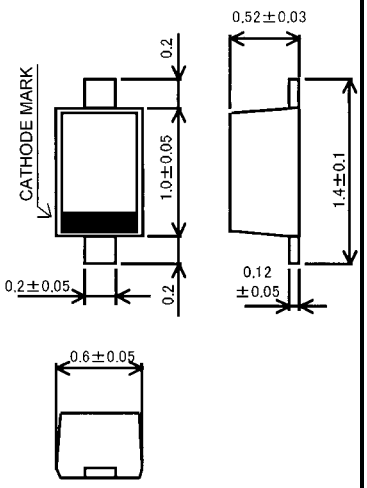
TOSHIBA DIODE Silicon Epitaxial Planar Type

JDV2S17S

VCO for UHF Band Radio

Unit: mm

- High Capacitance Ratio: $C1_V/C4_V$ = 2.1 (typ.)
- Low Series Resistance : r_s = 0.6 Ω (typ.)
- This device is suitable for use in a small-size tuner.



sESC	
JEDEC	—
JEITA	—
TOSHIBA	1-1K1A

Weight: 0.0011 g (typ.)

Maximum Ratings (Ta = 25°C)

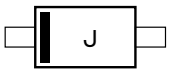
Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	150	°C
Storage temperature range	T_{stg}	−55~150	°C

Electrical Characteristics (Ta = 25°C)

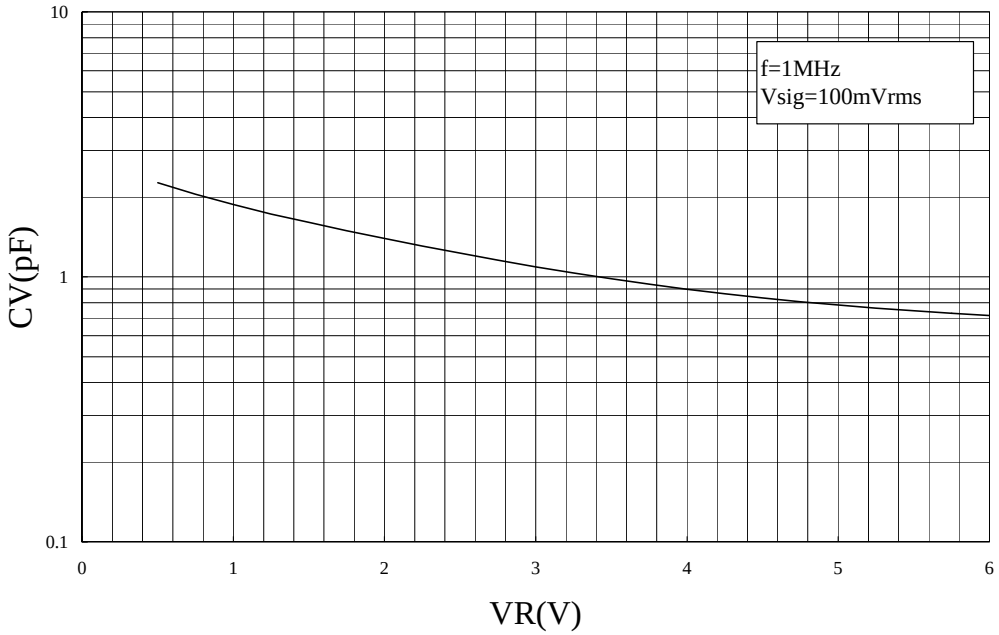
Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	I_R = 1 μA	10	—	—	V
Reverse current	I_R	V_R = 10 V	—	—	3	nA
Capacitance	$C1_V$	V_R = 1 V, f = 1 MHz	1.77	—	2.01	pF
	$C4_V$	V_R = 4 V, f = 1 MHz	0.8	—	1.0	
Capacitance ratio	$C1_V/C4_V$	—	2	—	2.2	—
Series resistance	r_s	V_R = 1 V, f = 470 MHz	—	0.6	0.75	Ω

Note: Signal level when capacitance is measured: V_{sig} = 100 mVrms

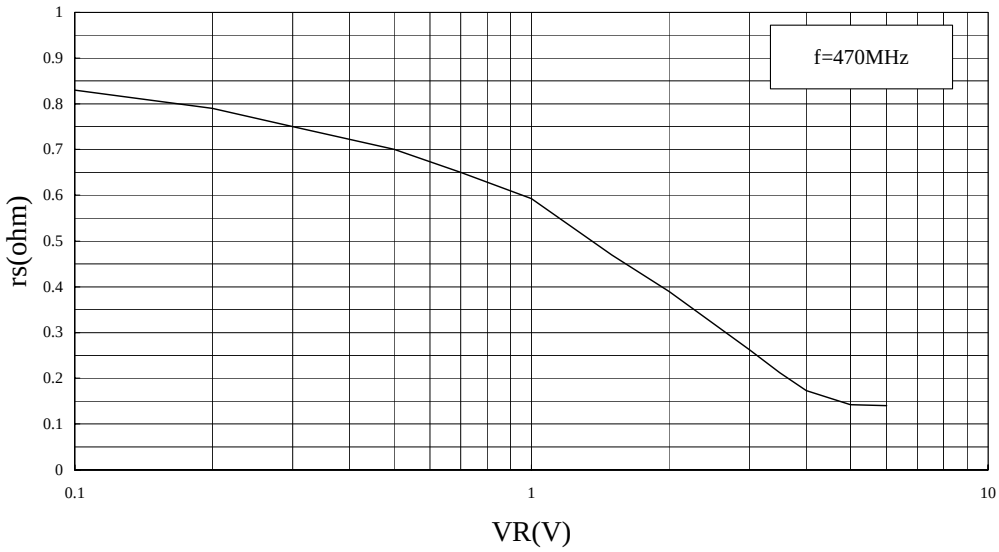
Marking



C-V


10
1
0.1
CV(pF)
f=1MHz
Vsig=100mVrms
0
1
2
3
4
5
6
VR(V)

rs-VR


1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
rs(ohm)
f=470MHz
0.1
1
10
VR(V)

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