

TOSHIBA Diode Silicon Epitaxial Planar Type

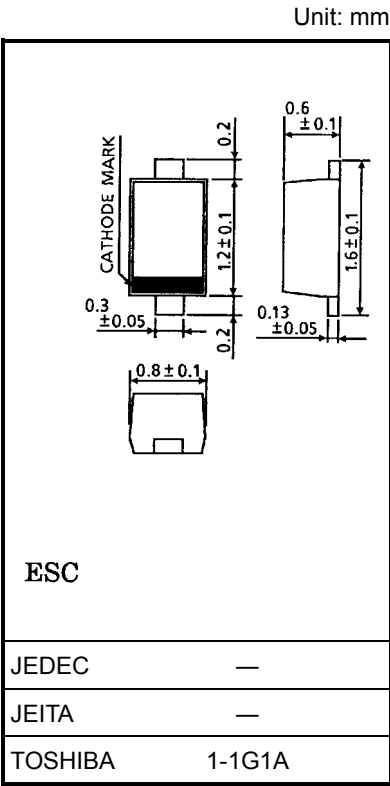
1SV311

VCO for UHF Band Radio

- High capacitance ratio: $C_1 \text{ V}/C_4 \text{ V} = 2.1$ (typ.)
- Low series resistance: $r_s = 0.28 \text{ } \Omega$ (typ.)
- Useful for small size tuner

Maximum Ratings (Ta = 25°C)

Characteristics	Symbol	Rating	Unit
Reverse voltage	V_R	10	V
Junction temperature	T_j	125	°C
Storage temperature range	T_{stg}	-55~125	°C



Electrical Characteristics (Ta = 25°C)

Weight: 0.0014 g (typ.)

Characteristics	Symbol	Test Condition	Min	Typ.	Max	Unit
Reverse voltage	V_R	$I_R = 1 \text{ } \mu\text{A}$	10	—	—	V
Reverse current	I_R	$V_R = 10 \text{ V}$	—	—	3	nA
Capacitance	$C_1 \text{ V}$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	9.7	—	11.1	pF
Capacitance	$C_4 \text{ V}$	$V_R = 4 \text{ V}, f = 1 \text{ MHz}$	4.45	—	5.45	pF
Capacitance ratio	$C_1 \text{ V}/C_4 \text{ V}$	—	1.8	2.1	—	—
Series resistance	r_s	$V_R = 1 \text{ V}, f = 470 \text{ MHz}$	—	0.28	0.4	Ω

Marking

