

TOSHIBA DIODE SILICON EPITAXIAL PLANAR TYPE

1SV313

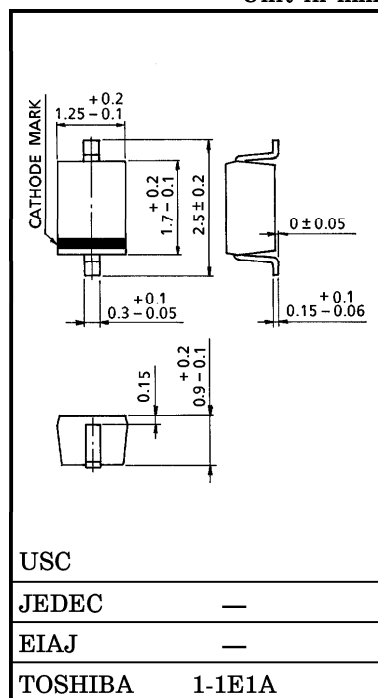
VCO FOR UHF BAND RADIO

Unit in mm

- 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

MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

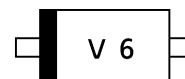
CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	V_R	10	V
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55~125	$^\circ\text{C}$



ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Voltage	V_R	$I_R = 1 \mu\text{A}$	10	—	—	V
Reverse Current	I_R	$V_R = 10 \text{ V}$	—	—	3	nA
Capacitance	$C_{0.5V}$	$V_R = 0.5 \text{ V}, f = 1 \text{ MHz}$	7.3	—	8.4	pF
Capacitance	$C_{2.5V}$	$V_R = 2.5 \text{ V}, f = 1 \text{ MHz}$	2.75	—	3.4	pF
Capacitance Ratio	$C_{0.5V} / C_{2.5V}$	—	2.4	2.5	—	—
Series Resistance	r_s	$V_R = 1 \text{ V}, f = 470 \text{ MHz}$	—	0.35	—	Ω

MARKING



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