

TOSHIBA VARIABLE CAPACITANCE DIODE SILICON EPITAXIAL PLANAR TYPE

1SV277

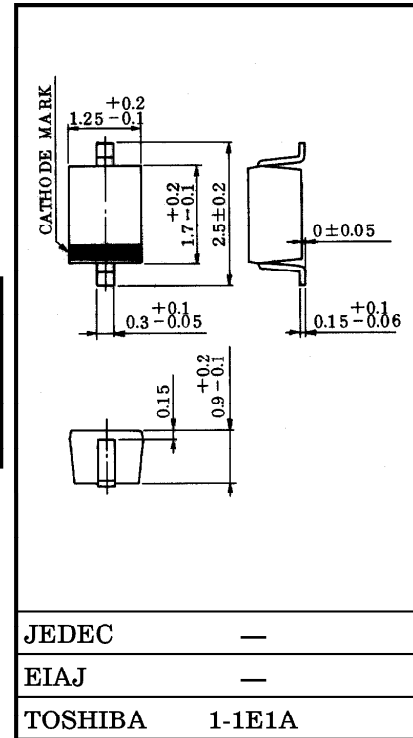
VCO FOR UHF BAND RADIO

Unit in mm

- High Capacitance Ratio : $C_{1V}/C_{4V}=2.3$ (Typ.)
- Low Series Resistance : $r_s=0.42\Omega$ (Typ.)
- Small Package

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}	$-55\sim 125$	$^\circ\text{C}$



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_{1V}	$V_R = 1\text{V}, f = 1\text{MHz}$	4.0	4.5	4.9	pF
Capacitance	C_{4V}	$V_R = 4\text{V}, f = 1\text{MHz}$	1.85	2.0	2.35	pF
Capacitance Ratio	C_{1V}/C_{4V}	—	2.0	2.3	—	—
Series Resistance	r_s	$V_R = 1\text{V}, f = 470\text{MHz}$	—	0.42	0.55	Ω

MARKING



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