

SEMICONDUCTOR
TOSHIBA TECHNICAL DATA

TOSHIBA VARIABLE CAPACITANCE DIODE
1SV273
 SILICON EPITAXIAL PLANAR TYPE

(1SV273)

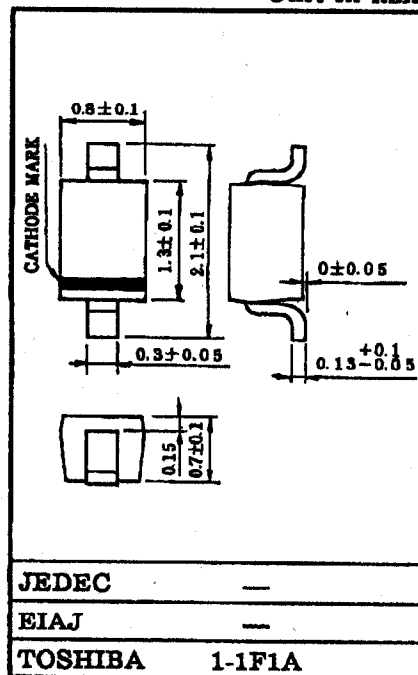
VCO FOR UHF BAND RADIO

- High Capacitance Ratio : $C_{1V}/C_{4V}=2.0$ (Typ.)
- Low Series Resistance : $r_s=0.28\Omega$ (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}	-55-125	$^\circ\text{C}$

Unit in mm



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}	$V_R = 1\text{V}, f = 1\text{MHz}$	15	16	17	pF
Capacitance	C_{4V}	$V_R = 4\text{V}, f = 1\text{MHz}$	7.3	8.0	8.7	pF
Capacitance Ratio	C_{1V}/C_{4V}	—	1.8	2.0	—	—
Series Resistance	r_s	$V_R = 1\text{V}, f = 470\text{MHz}$	—	0.28	0.5	Ω

MARKING



© The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by TOSHIBA CORPORATION for any infringements of intellectual property or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any intellectual property or other rights of TOSHIBA CORPORATION or others.

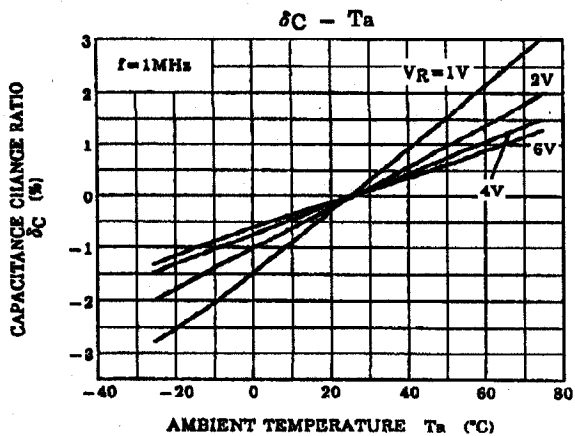
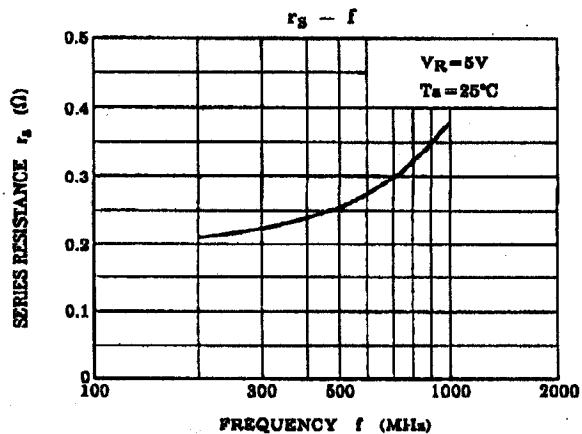
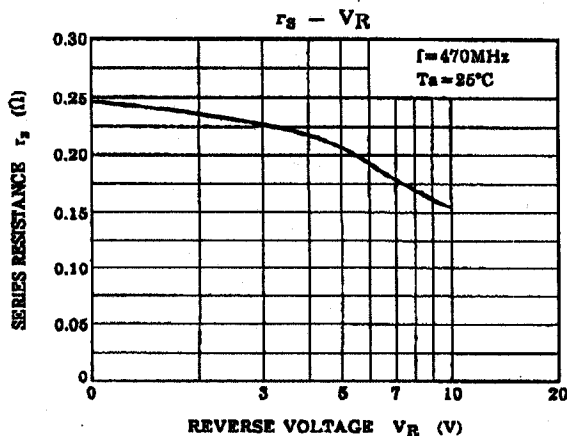
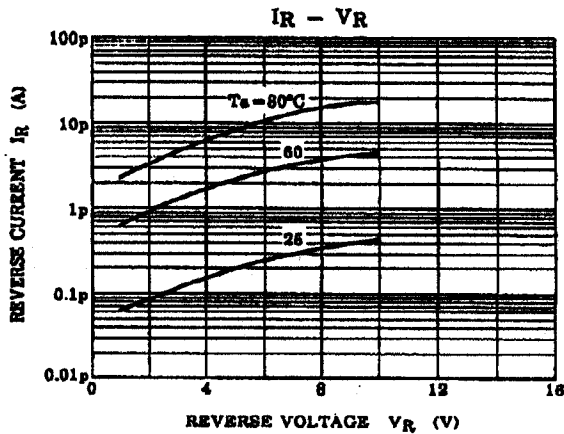
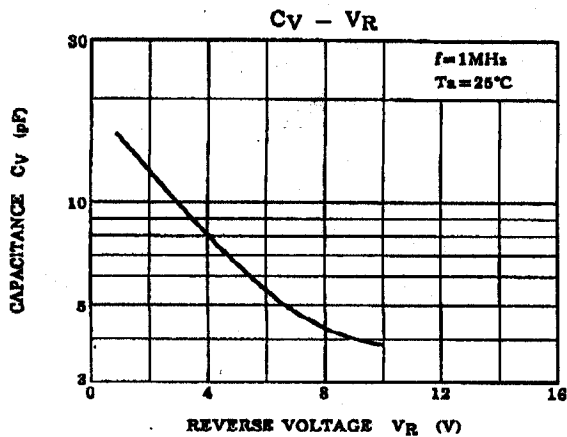
② These TOSHIBA products are intended for use in general commercial applications (office equipment, communication equipment, measuring equipment, domestic appliances, etc.). please make sure that you consult with us before you use these TOSHIBA products in equipment which requires extraordinarily high quality and/or reliability, and in equipment which may involve life threatening or critical application, including but not limited to such uses as atomic energy control, airplane or spaceship instrumentation, traffic signals, medical instrumentation, combustion control, all types of safety devices, etc. TOSHIBA cannot accept and hereby disclaims liability for any damage which may occur in case the TOSHIBA products are used in such equipment or applications without prior consultation with TOSHIBA.

1SV273 - 1

1994 - 7 - 11

TOSHIBA CORPORATION

(1SV273)



1SV273 - 2*

1994 - 7 - 11

TOSHIBA CORPORATION