

# 1SV306C-WT

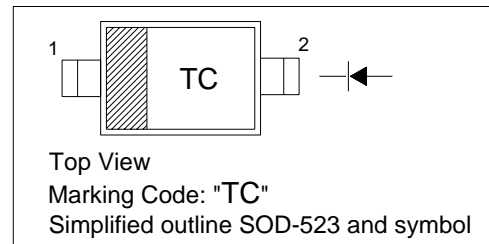
## VHF TUNER VARIABLE CAPACITANCE DIODE

### FEATURES

- High capacitance ratio ( $n = 11$  min)
- Low series resistance and good C-V linearity
- Ultra small Flat Package (UFP) is suitable for surface mount design

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

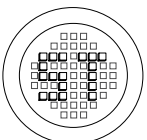


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	34	V
Operating Junction Temperature Range	$T_j$	150	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

### Electrical Characteristics ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Min.	Max.	Unit
Reverse Current at $V_R = 32\text{ V}$ at $V_R = 32\text{ V}$ , $T_j = 60\text{ }^\circ\text{C}$	$I_R$	- -	10 100	nA
Diode Capacitance at $V_R = 2\text{ V}$ , $f = 1\text{ MHz}$ at $V_R = 25\text{ V}$ , $f = 1\text{ MHz}$	$C_d$	29.5 2.57	34 2.9	pF
Capacitance Ratio	$C_{d(2V)}/C_{d(25V)}$	11	-	-
Matching Error at $V_R = 2\text{ V}$ to $25\text{ V}$ , $f = 1\text{ MHz}$	$\Delta C_d/C_d$	-	2	%
Series Resistance at $f = 470\text{ MHz}$ , $V_R = 5\text{ V}$	$r_s$	-	0.75	$\Omega$



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РАДИОТЕХ

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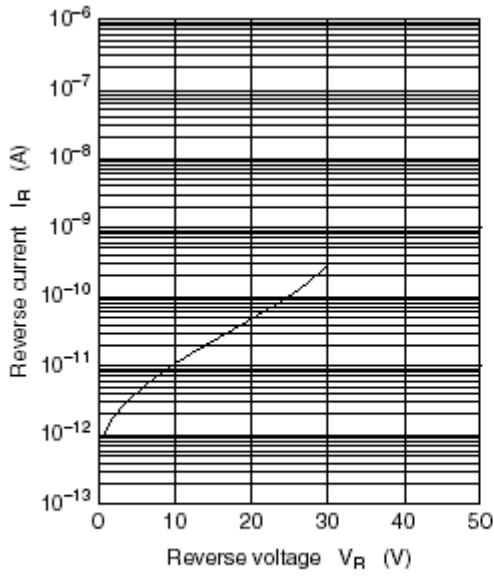


Fig.1 Reverse current vs. Reverse voltage

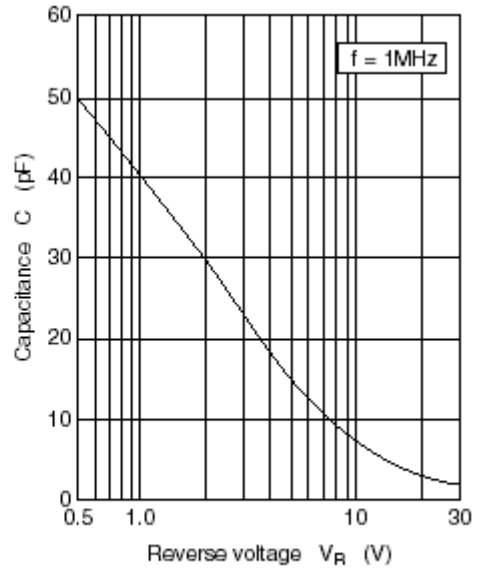


Fig.2 Capacitance vs. Reverse voltage

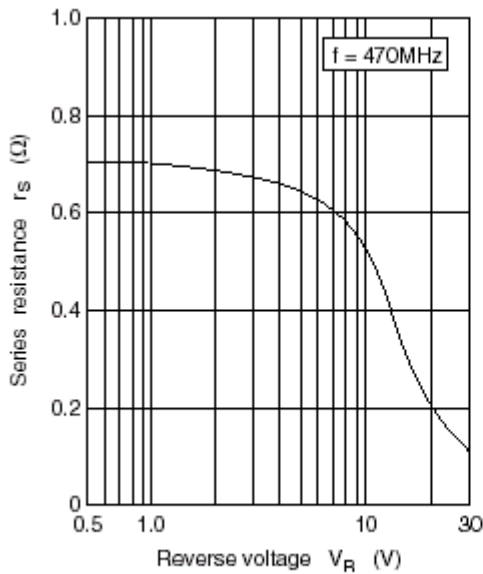


Fig.3 Series resistance vs. Reverse voltage

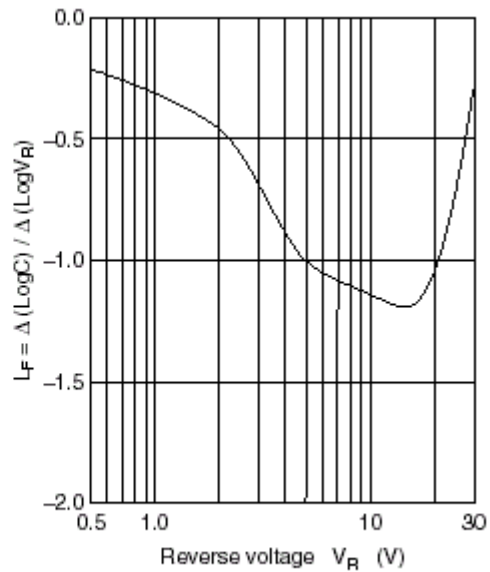
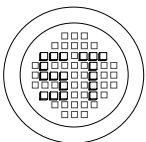


Fig.4 Linearity factor vs. Reverse voltage



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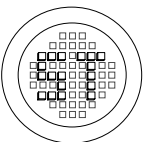
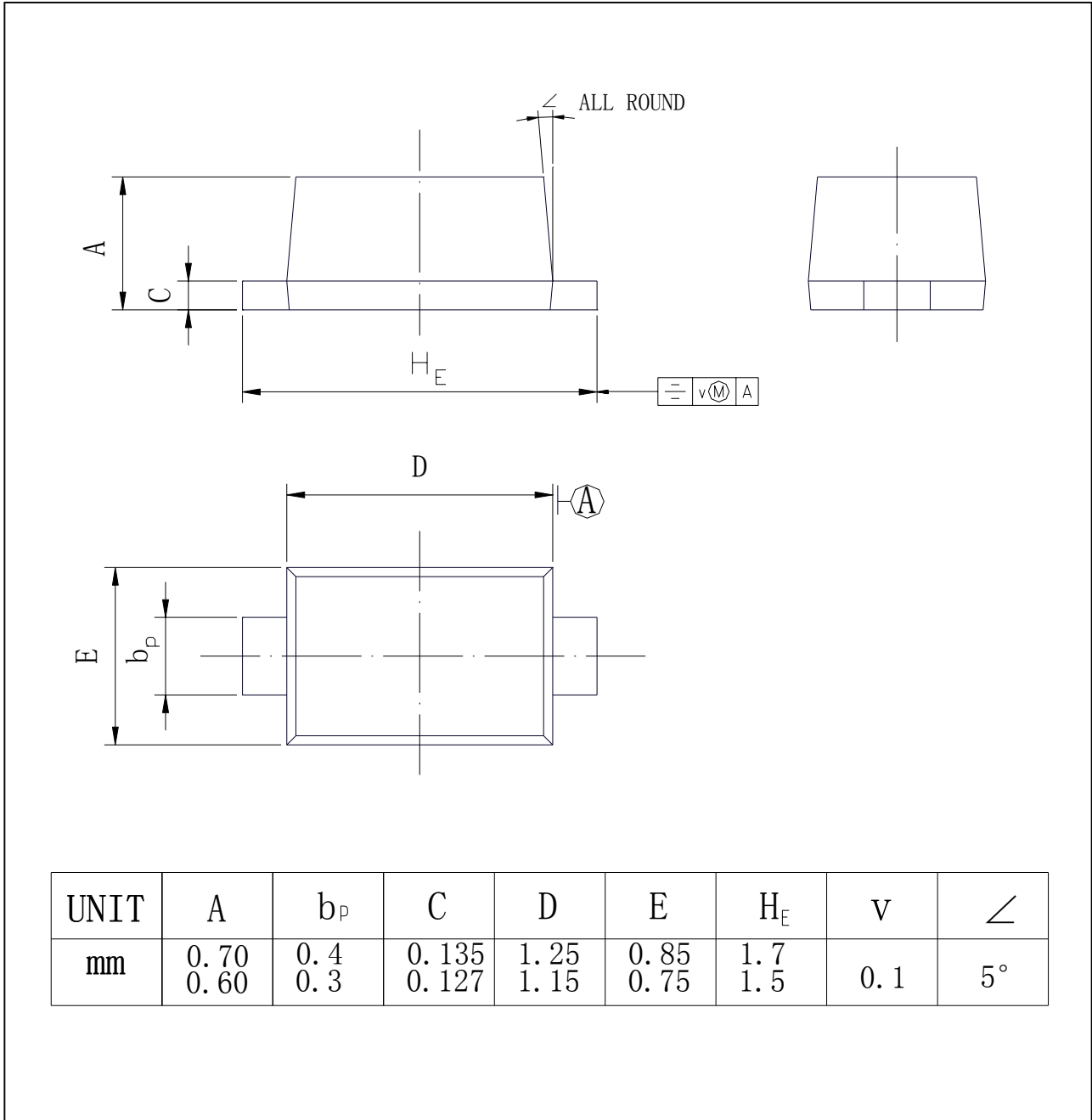
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## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-523



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