

1SV306AWT

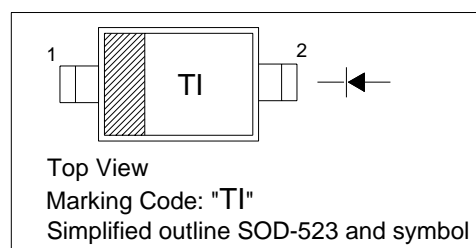
VHF TUNER VARIABLE CAPACITANCE DIODE

FEATURES

- Low series resistance and good C-V linearity.
- High capacitance ratio ($n=11.0\text{min}$).

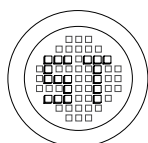
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Limits	Unit
Reverse voltage	V_R	32	V
Operating junction temperature range	T_j	125	?
Storage temperature	T_{stg}	-55 ... +125	?



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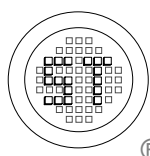
РАДИОТЕХ

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Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse current	I_R	- -	- -	10 100	nA	$V_R = 30V$ $V_R = 30V, T_j = 60^\circ C$
Diode capacitance	C_d	29.3 2.57	- -	34.2 2.92	pF	$V_R = 2V, f = 1MHz$ $V_R = 25V, f = 1MHz$
Capacitance ratio	$C_{d(2v)} / C_{d(25v)}$	11.0	-	-	-	-
Capacitance matching	$\Delta C_d / C_d$	-	-	2	%	$V_R = 2V \text{ to } 25V, f = 1MHz$
Series resistance	r_s	-	-	0.75	Ω	$f = 470MHz, V_R = 5V$



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ISO 9001 : 2000
Certificate No. 05/11/2004

Dated : 05/11/2004

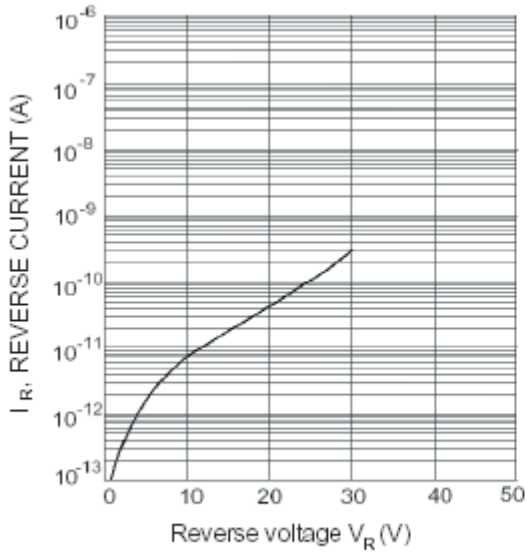


Fig.1 Reverse current Vs. Reverse voltage

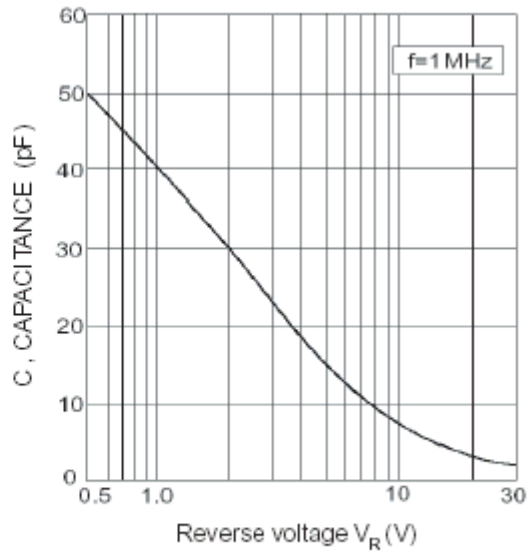


Fig.2 Capacitance Vs. Reverse voltage

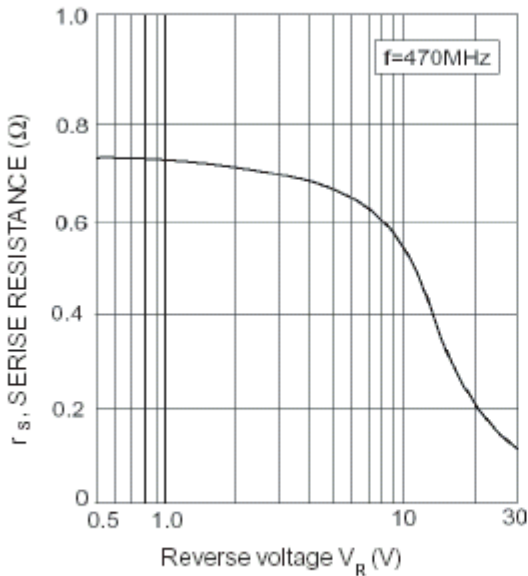


Fig.3 Series resistance Vs. Reverse voltage

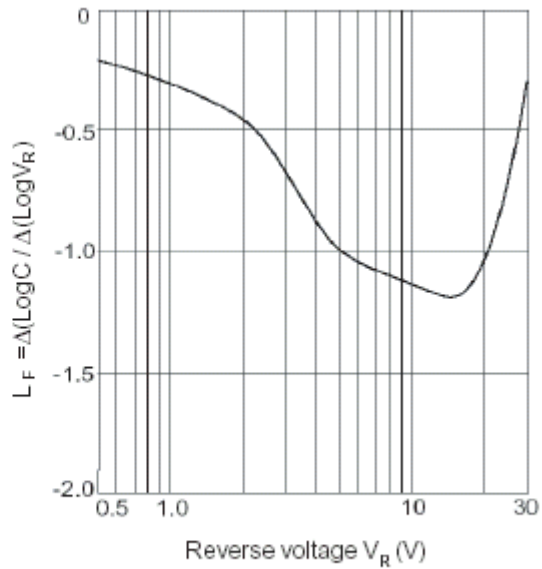
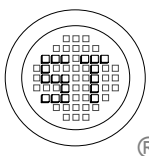


Fig.4 Linearity factor Vs. Reverse voltage



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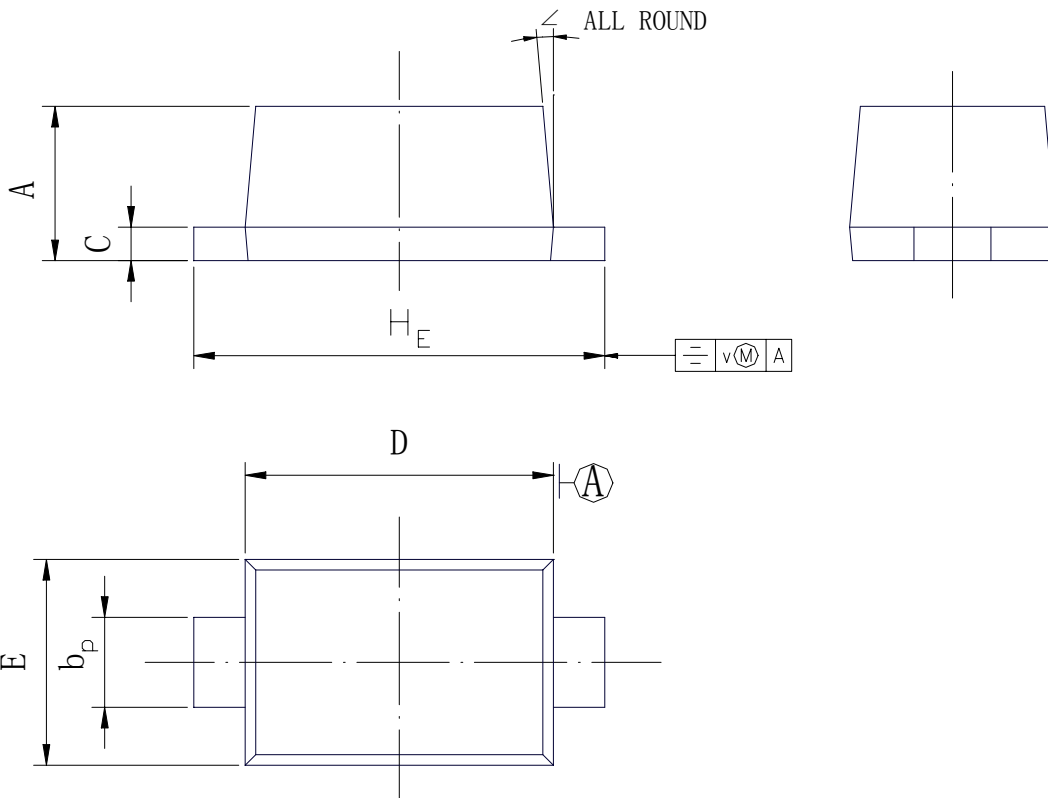
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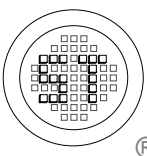
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PACKAGE OUTLINE

SOD-523

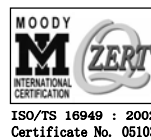


UNIT	A	b _P	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°



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