

1SV202BWT

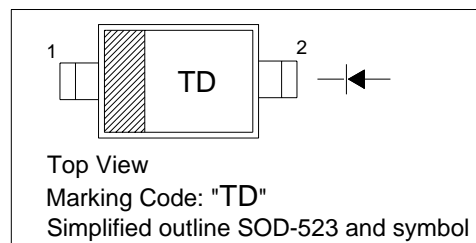
VHF / UHF VARIABLE CAPACITANCE DIODE

FEATURES

- Low matching error.
- High capacitance ratio. ($n=6.3\text{min}$)
- Low series resistance. ($r_s=0.57\Omega$)

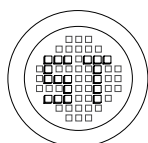
PINNING

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
Peak reverse voltage $R_L=10\text{K}\Omega$	V_{RM}	35	V
Operating junction temperature range	T_j	125	?
Storage temperature	T_{stg}	-55 ... +150	?



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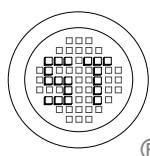
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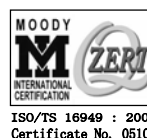
Electrical Characteristics (Ta = 25 °C)

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	14.15 2.06	- -	15.75 2.35	pF	$V_R = 2V, f = 1MHz$ $V_R = 25V, f = 1MHz$
Capacitance ratio	$C_{d(2v)} / C_{d(25v)}$	6.30	-	-	-	-
Matching error	$\Delta C_d / C_d$	-	-	1.8	%	$V_R = 2V \text{ to } 25V; f = 1MHz$
Series resistance	r_s	-	-	0.57	Ω	$f = 470MHz, V_R = 5V$



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Dated : 06/11/2004

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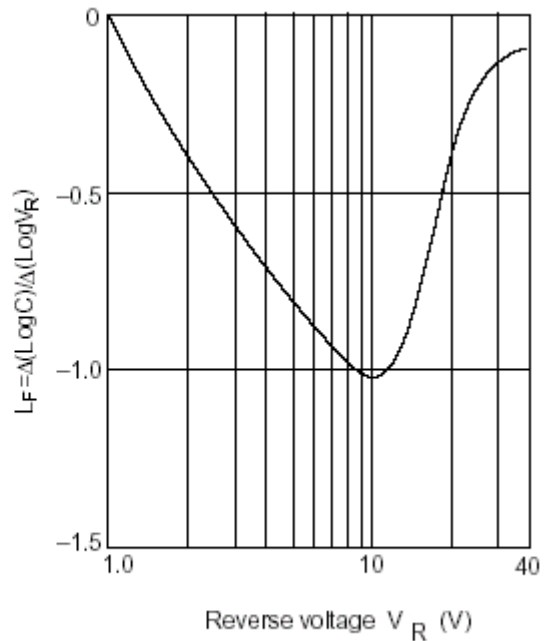
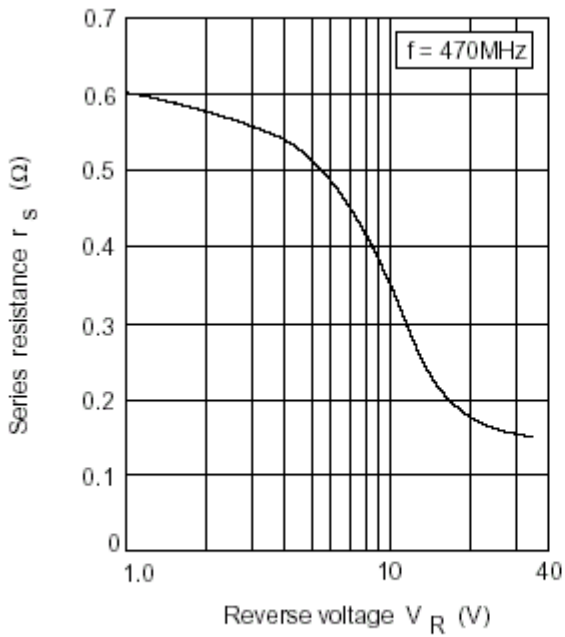
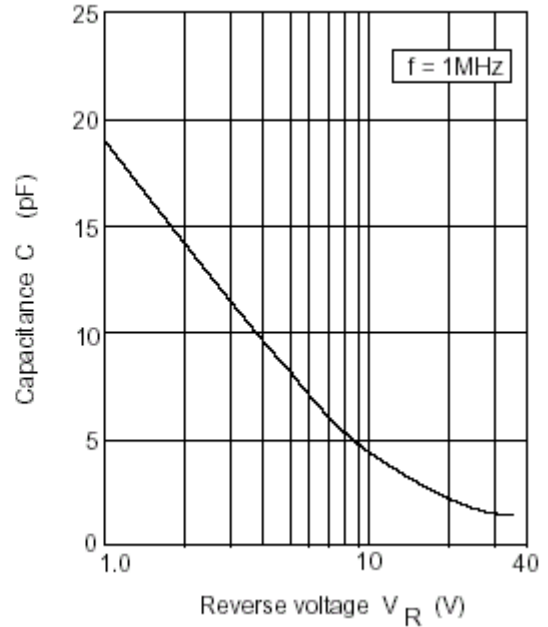
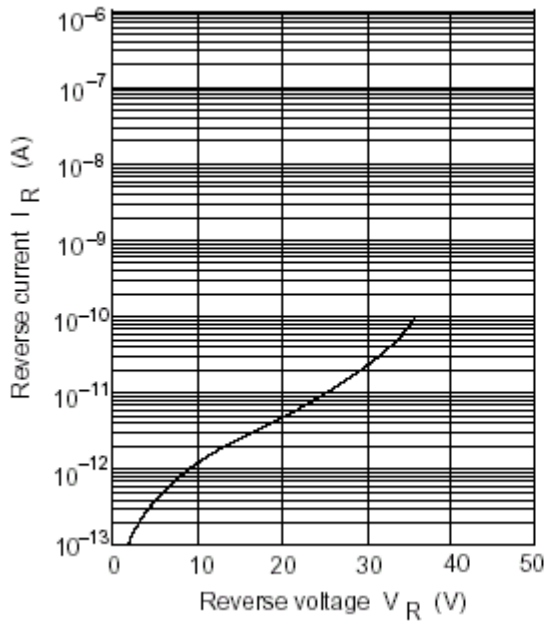
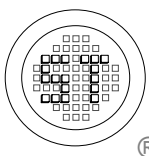


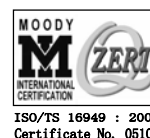
Fig.3 Series resistance Vs. Reverse voltage

Fig.4 Linearity factor Vs. Reverse voltage



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



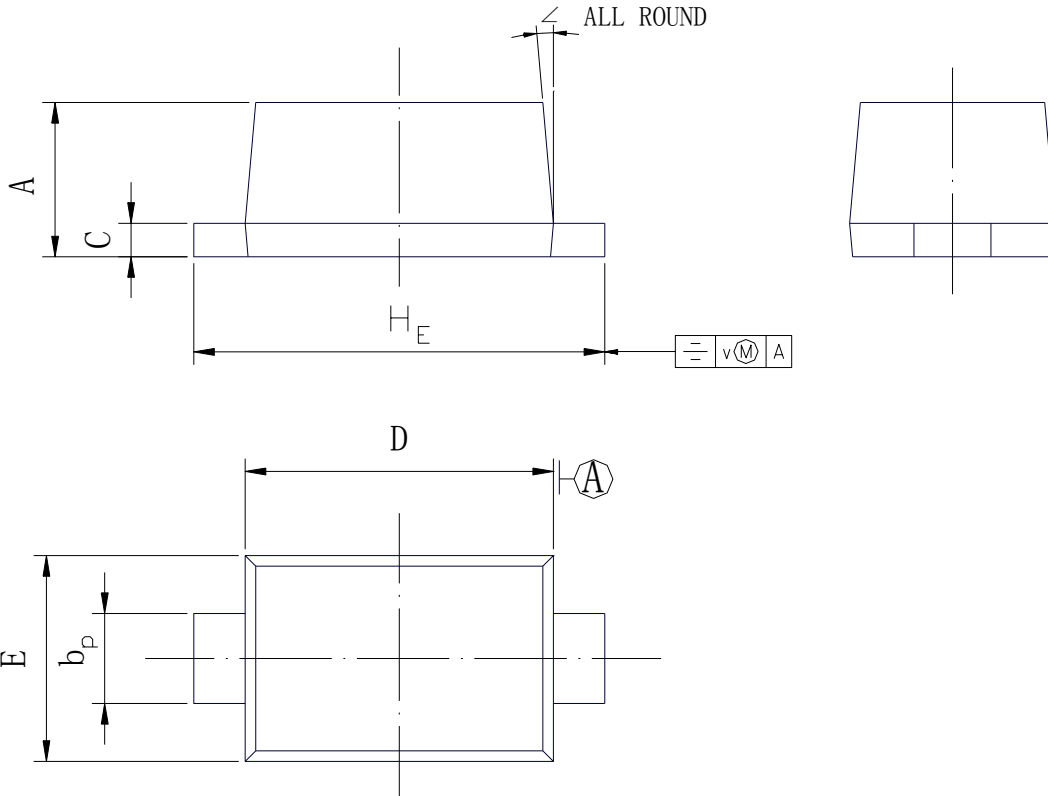
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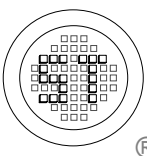
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PACKAGE OUTLINE

SOD-523

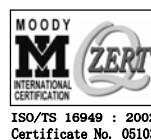


UNIT	A	b _p	C	D	E	H _E	v	∠
mm	0.70 0.60	0.4 0.3	0.135 0.127	1.25 1.15	0.85 0.75	1.65 1.55	0.1	5°



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