

BB669ST

SILICON TUNING DIODE

FEATURES

- Very high capacitance ratio
- Low series resistance
- Excellent uniformity and matching due to "in-line" matching assembly procedure

APPLICATIONS

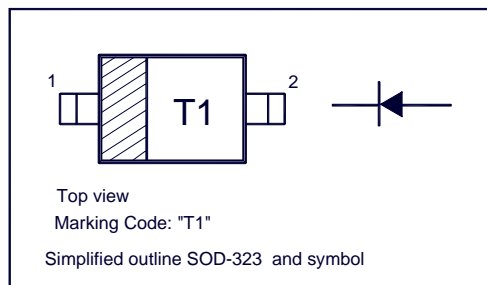
- For VHF 2-Band-hyperband-TV-tuners

DESCRIPTION

- Silicon tuning diode in a small plastic SMD SOD-323 package

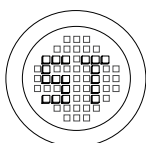
PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



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

Parameter	Symbol	Limits	Unit
Diode reverse voltage	V_R	30	V
Peak reverse voltage(R? 5k Ω)	V_{RM}	35	V
Forward current	I_F	20	mA
Operating temperature range	T_{op}	-55...+150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 ... +150	$^{\circ}\text{C}$



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РАДИОТЕХ

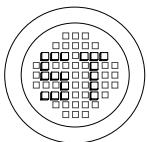
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Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse current	I_R	- -	- -	10 200	nA	$V_R = 30V$ $V_R = 30V, T_a = 85^\circ C$
Diode capacitance	C_T	51 39.6 2.6 2.5	56.5 43.4 2.8 2.7	61.5 47.2 3 2.9	pF	$V_R = 1V, f = 1MHz$ $V_R = 2V, f = 1MHz$ $V_R = 25V, f = 1MHz$ $V_R = 28V, f = 1MHz$
Capacitance ratio	C_{T2} / C_{T25}	14.5	15.5	17	-	$V_R = 2V, V_R = 25V, f = 1MHz$
Capacitance ratio	C_{T1} / C_{T28}	18	20.9	23.3	-	$V_R = 1V, V_R = 28V, f = 1MHz$
Capacitance ratio ¹⁾	$\Delta C_T / C_T$	-	-	2	%	$V_R = 1V, V_R = 28V, f = 1MHz$
Series resistance	r_s	-	0.85	-	Ω	$V_R = 8V, f = 470MHz$
Series inductance	L_s	-	1.8	-	Nh	

1) In-line matching



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Certificate No. 7116

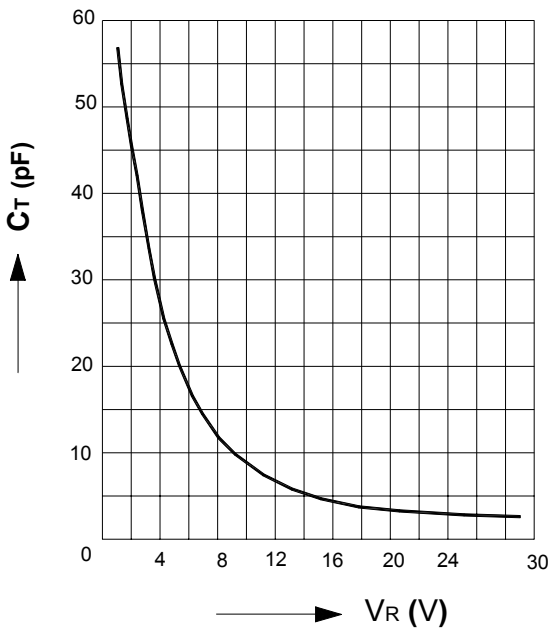


ISO 9001:2000
Certificate No. 0506098

Dated : 29/10/2004

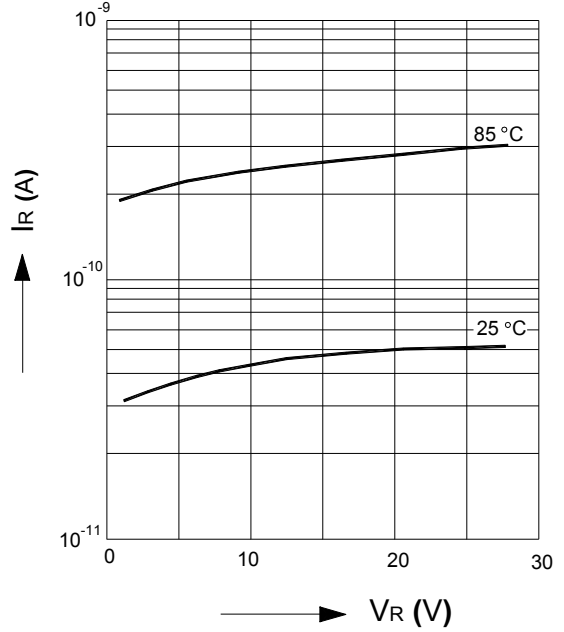
Diode capacitance

$C_T = f(V_R), f = 1\text{MHz}$

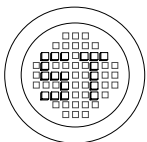
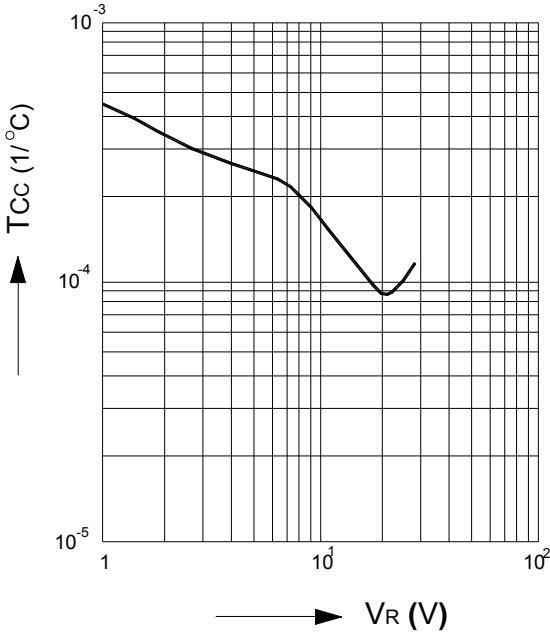


Reverse current

$I_R = f(V_R), T_a = \text{Parameter}$



Temperature coefficient of the diode capacitance, $T_{CC} = f(V_R)$



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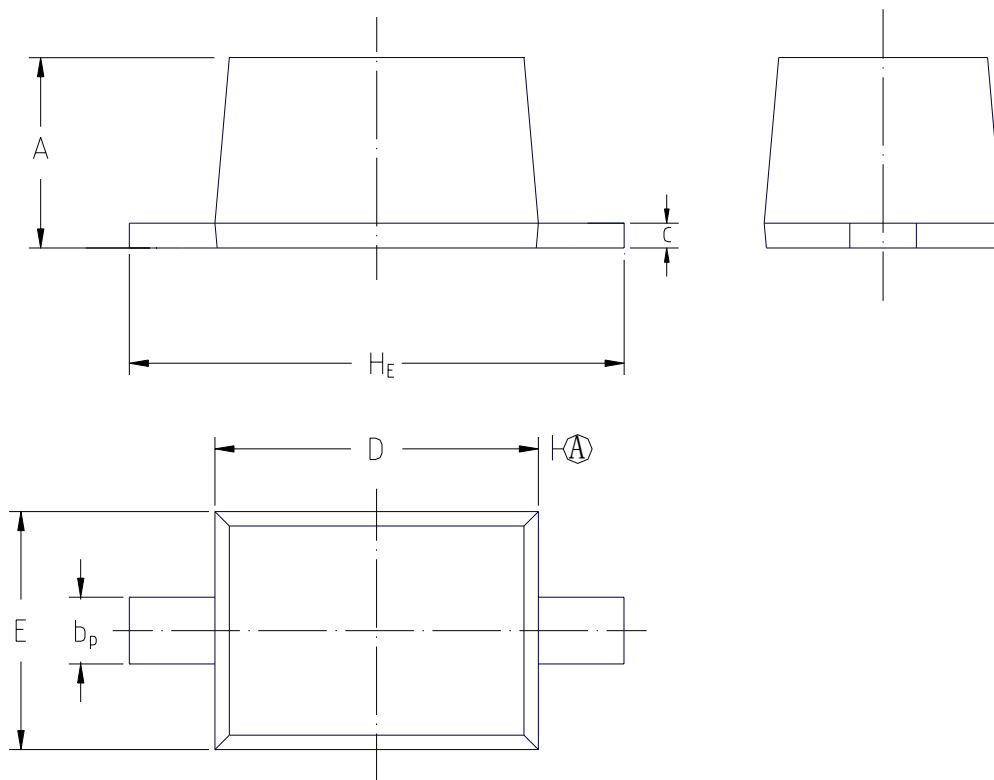


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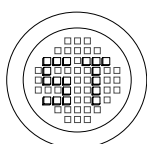
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PACKAGE OUTLINE

SOD-323



UNIT	A	b_p	c	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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