

BB639ST

SILICON VARIABLE CAPACITANCE DIODE

FEATURES

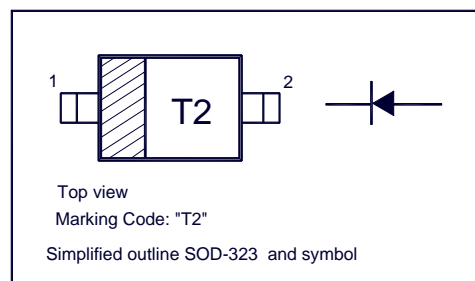
- High capacitance ratio
- Low series resistance
- Low series inductance
- Excellent uniformity and matching due to "in-line" matching assembly procedure

APPLICATIONS

- For tuning of extended frequency band in VHF TV/VTR tuners

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

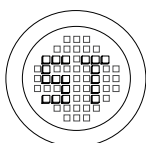


DESCRIPTION

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

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

Parameter	Symbol	Limits	Unit
Diode reverse voltage	V_R	30	V
Peak reverse voltage($R \geq 5\text{ k}\Omega$)	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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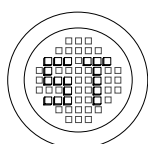
РАДИОТЕХ

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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	36 27.7 2.5 2.4	38.3 29.75 2.85 2.6	40 31.8 3.2 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}	9.8	10.4	-	-	$V_R = 2V, V_R = 25V, f = 1MHz$
Capacitance ratio	C_{T1} / C_{T28}	13.5	14.7	-	-	$V_R = 1V, V_R = 28V, f = 1MHz$
Capacitance matching	$\Delta C_T / C_T$	-	-	2.5	%	$V_R = 1V, V_R = 28V, f = 1MHz,$ 7 diodes sequence
Series resistance	r_s	-	0.65	0.7	Ω	$V_R = 5V, f = 470MHz$
Series inductance	L_s	-	1.8	-	nH	



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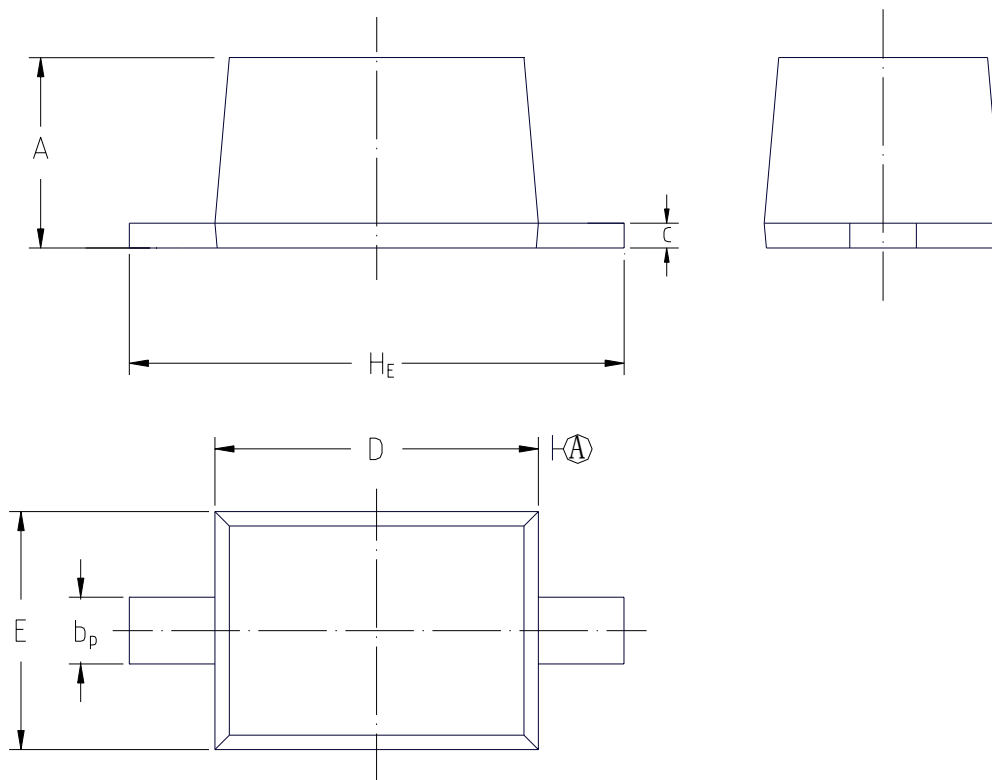
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 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098

Dated : 30/08/2004

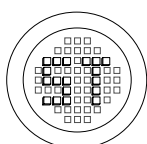
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PACKAGE OUTLINE

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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