

BB182WT

VHF VARIABLE CAPACITANCE DIODE

FEATURES

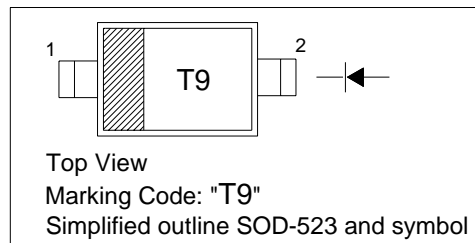
- High linearity
- Excellent matching to 2% DMA
- Ultra small plastic SMD package
- C28: 2.7 pF ; ratio:22
- Low series resistance

APPLICATIONS

- Electronic tuning in VHF television tuners, band A up to 160 MHz.
- Voltage controlled oscillators (VCO).

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

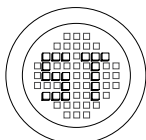


DESCRIPTION

- The BB182WT is a planar technology variable capacitance diode, in a SOD-523 package.
- The excellent matching performance is achieved by gliding matching and a direct matching assembly procedure.

Absolute Maximum Ratings (Ta = 25 °C)

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	V_R	32	V
Peak reverse voltage In series with a 10 kΩ resistor	V_{RM}	35	V
Continuous forward current	I_F	20	mA
Operating junction temperature range	T_j	-55...+175	?
Storage temperature	T_{stg}	-55 ... +175	?



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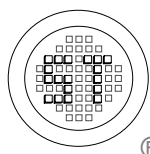
РАДИОТЕХ

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BB182WT

Electrical Characteristics (Ta = 25 °C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse current	I_R	- -	- -	10 200	nA	$V_R = 30V$ $V_R = 30V, T_j = 85^\circ C$
Diode capacitance	C_d	52 2.48	- -	62 2.89	pF	$V_R = 1V, f = 1MHz$ $V_R = 28V, f = 1MHz$
Capacitance ratio	$C_{d(1v)} / C_{d(2v)}$	-	1.31	-	-	$f = 1MHz$
Capacitance ratio	$C_{d(1v)} / C_{d(28v)}$	20.6	-	-	-	$f = 1MHz$
Capacitance ratio	$C_{d(25v)} / C_{d(28v)}$	-	1.05	-	-	$f = 1MHz$
Capacitance matching	$\Delta C_d / C_d$	-	-	2	%	$V_R = 1V$ to $28V$; in a sequence of 15 diodes (gliding)
Series resistance	r_s	-	1	1.2	Ω	$f = 100MHz$ V_R is the value at which $C_d = 30pF$



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ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001
Certificate No. 7116



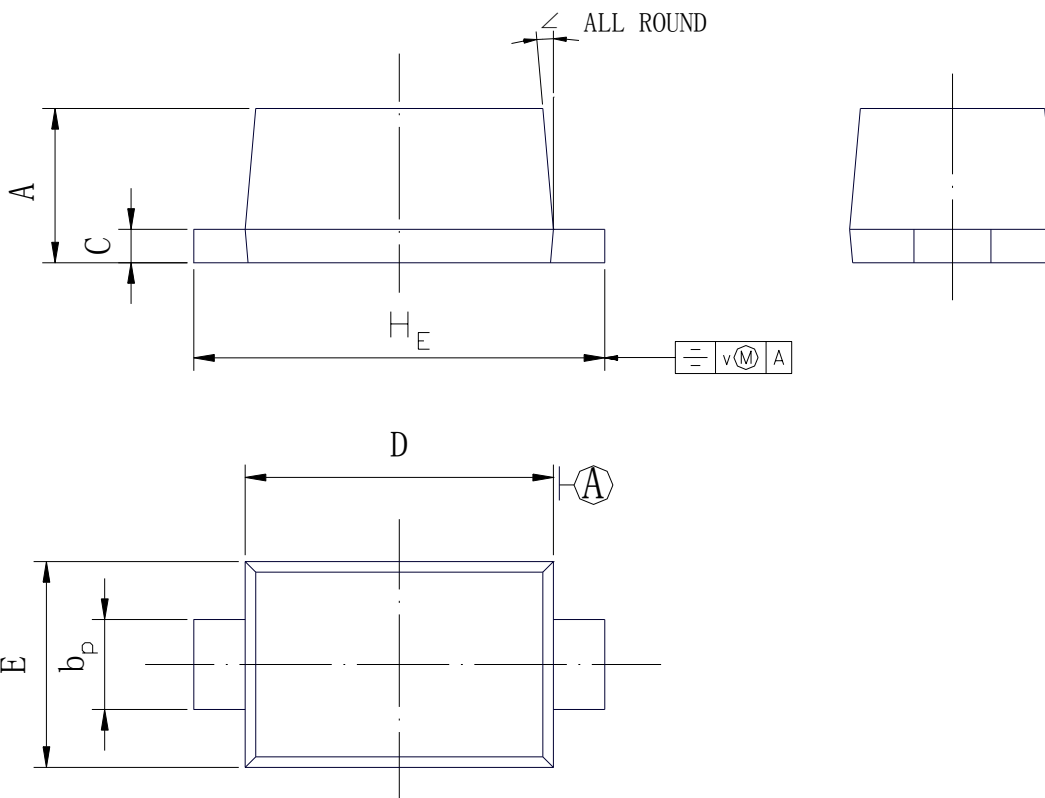
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Dated : 24/02/2005

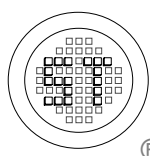
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PACKAGE OUTLINE

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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