

Features	Applications
<ul style="list-style-type: none"> ● High frequency & Low Noise ● SMD Package (7.0×5.0mm) ● Quick Warm-up 	<ul style="list-style-type: none"> ● Low vibration RF Communication ● Wireless Communication ● Low Phase Noise Signal Resource ● SDH/SONET ● GNSS



BV0507D Specifications					
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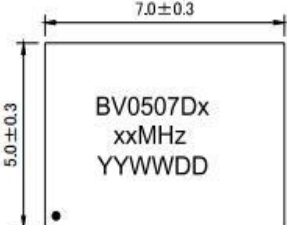
Parameter	Value			Unit	Conditions	
	Min.	Typ.	Max.			
Supply Voltage	-	3.3	-	V	V _{cc} ±5%	
	-	5	-	V	V _{cc} ±5%	
Supply Current	20	-	30	mA		
Frequency Range	10 ~ 156.52			MHz		
Nominal Frequency	40,80, 100, 120, 122.88			MHz		
Freq. Stability Vs. Temp.	±10	±12	±15	ppm	-40°C~+85°C	
CMOS	V _{OH}	2.4	-	-	V	CMOS Output, Load=15pf
	V _{OL}	-	-	0.4	V	CMOS Output, Load=15pf
	Duty Cycle	45	-	55	%	(V _{OH} - V _{OL})/2
	Rise/Fall Edge	-	-	3	ns	CMOS Output, Load=15pf
	Load	-	-	15	pf	
RMS Jitter(By E5052B)	20	-	45	fs	12KHz~5MHz	
Supply Sensitivity	-	-	±0.1	ppm	V _{cc} ±5%	
Load Sensitivity	-	-	±0.2		Load±5%	
Aging/ First Year	±0.3	-	±1.0		Standard	
SSB Phase Noise @100MHz	-	-80	-75	dBc/Hz	Offset 10Hz	At +25°C
	-	-112	-110		Offset 100Hz	
	-	-142	-140		Offset 1kHz	
	-	-158	-155		Offset 10kHz	
	-	-160	-158		Offset 100kHz	
Control Voltage Range	0~3.3			V		
Frequency Tuning Range	±20	±30	±40	ppm	At shipment, nominal EFC, +25°C	
Tuning Slope	-					
Non-linearity	-	-	10	%		

Environmental Conditions					
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Operating Temperature Range	-40°C ~ +85°C				
Storage Temperature Range	-55°C ~ +125°C				

Outline Dimension & Pin Connections

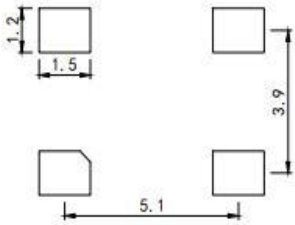
Package D:

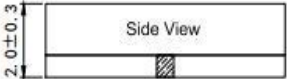
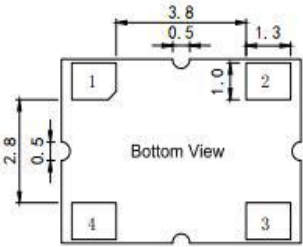


Pin Connections

Pin1	Vcon/NC
Pin2	GND
Pin3	Output
Pin4	Vcc

Recommended Land Pattern



Maximum Ratings

Parameter	Symbol	Rating
Supply Voltage	Vdd	-0.5V / 6V
Control Voltage	Vcon	0V / 3V
ESD, HBM/CDM/MM		4KV/ 2KV/ 200V

Reliability

Parameter	Condition
Temperature Stress Test	IEC60068, GJB360B
Mechanical Stress Test	IEC60068, GJB360B
EMC Test (ESD)	IEC61000, JESD22
Solderability	EIA/JESD22-B102-C
Contact Pads	Gold over Nickel
RoHS	RoHS Directive 2011/65/EU Annex II Recasting 2002/95/EC

Ordering Guide

BV 0507D X X X X X X X X X X X X X X X X . X X

Product:
VCXO

Outline:
7.0 × 5.0mm

Output:
H: CMOS

Supply Voltage:
3: 3.3 V
5: 5.0 V

Temp. Range:
C: -20□ □ +70□
I: -40□ □ +85□

Frequency:
xx MHz
e.g.: 100 (100MHz)

Tuning Range:
XXXN: XXX ppm Min.
eg: 020N

Phase Noise:
C: -130dBc/Hz@1kHz
D: -135dBc/Hz@1kHz
E: -140dBc/Hz@1kHz

Stability vs. Temp.
155: ±15ppm

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