

**Features**

- Ultra Stable
- Wide Temperature Range
- Fast Warming-up
- Ultra Low Phase Noise

**Applications**

- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics


**BO2020H Specifications**

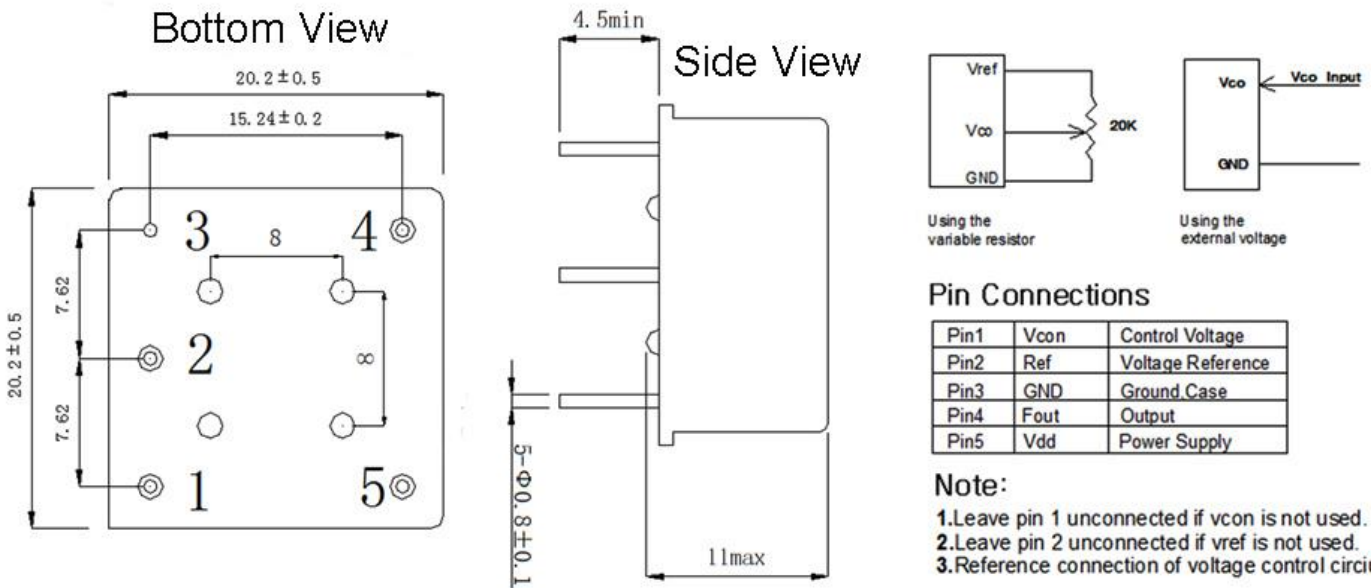
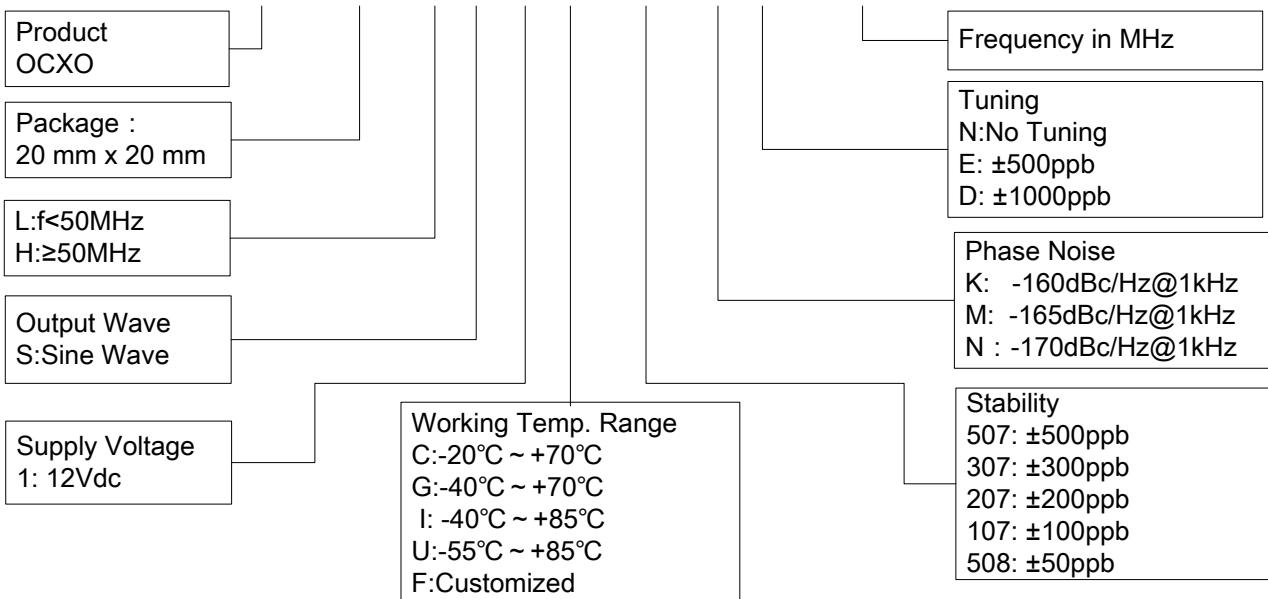
Parameter	Value			Unit	Condition
	Min.	Typ.	Max.		
Supply Voltage	–	12.0	–	V	
Power Consumption	–	–	4.5	W	During Warming-up
	–	–	1.5	W	Steady at +25°C & still air
Frequency Range	50 to 120			MHz	
Nominal Frequency	80,100			MHz	
Initial Frequency Tolerance	±100	–	±300	ppb	At shipment, nominal EFC
Freq. Stability Vs. Temp.	±50	–	±100	ppb	-20°C ~ +70°C
	±50	–	±100	ppb	-40°C ~ +70°C
	±100	–	±200	ppb	-40°C ~ +85°C
	±200	–	±500	ppb	-55°C ~ +85°C
Sine Wave	Output Level	7	–	dBm	
	Harmonics	–	–	-30	dBc
	Spurious	–	–	-70	dBc
	Load	–	50	–	Ω
Warm-up Time	–	–	5	Min	At +25°C, with accuracy of ±100ppb
Supply Sensitivity	–	–	±10	ppb	V <sub>cc</sub> ±5%
Load Sensitivity	–	–	±10		Load±5%
Aging per Day	–	–	±5		After 30 days of operation
Aging per Year	–	–	±500		After 30 days of operation
SSB Phase Noise @100MHz	-95	–	–	dBc/Hz	Offset 10Hz
	-125	–	–		Offset 100Hz
	-155	–	–		Offset 1kHz
	-165	–	–		Offset 10kHz
	-170	–	–		Offset 100kHz
At +25°C, 12V					
Control Voltage Range	0	–	5	V	
Frequency Turning Range	±0.5	–	±2.0	ppm	
Tuning Slope	Positive				

**Environmental Conditions**

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

**Reliability**

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

**Outline Dimension & Pin Connections**

**Ordering Guide**
**BO 2020HS X X XXX X X XXX.X**

**Example:** BO2020HS1C107KN100

**Disclaimer**

Xtaltq Technologies Co., Limited reserves the right to make changes to the product(s) and/or information contained herein without notice. No liability is assumed as a result of their use or application. No rights under any patent accompany the sale of any such product(s) or information.