

**Features**

- Ultra Stable
- Wide Temperature Range
- Fast Warming-up
- DIP Package(20mm\*20mm)

**Applications**

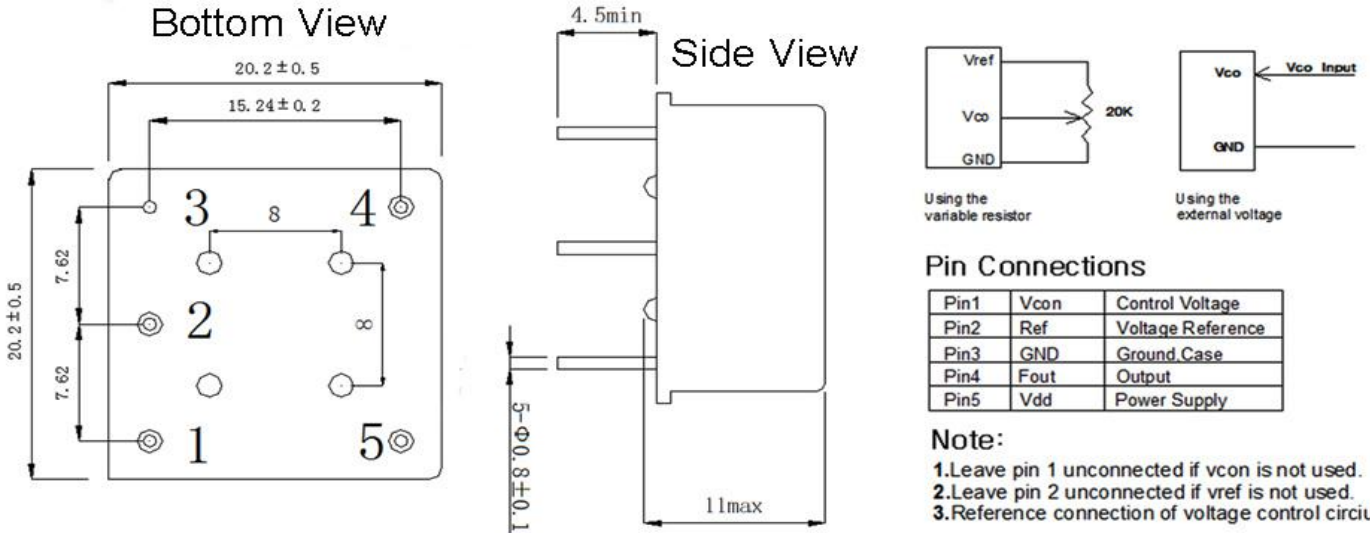
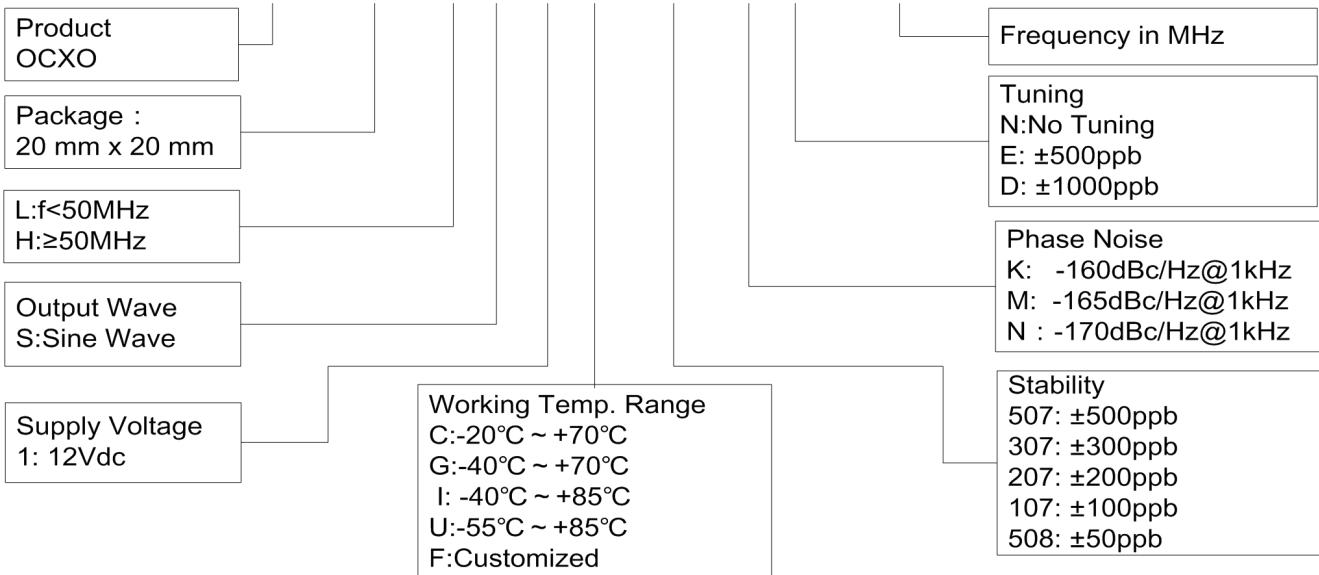
- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics


**BO2020H Specifications**

Parameter	Value			Unit	Condition
	Min.	Typ.	Max.		
Supply Voltage	-	5.0	-	V	
	-	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	Vcc±5%
Load Sensitivity	-	-	±10		Load±5%
Aging per Day	-	-	±2		After 30 days of operation
Aging per Year	-	-	±200		After 30 days of operation
SSB Phase Noise @100MHz	-	-	-95	dBc/Hz	Offset 10Hz
	-	-	-125		Offset 100Hz
	-	-	-160		Offset 1kHz
	-	-	-170		Offset 10kHz
	-	-	-170		Offset 100kHz
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