

Features

- High Stability
- Wide Temperature Range
- Fast Warming-up
- Low Phase Noise

Applications

- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics


BO2736H Series 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 ~ 120			MHz		
Nominal Frequency	80,100			MHz		
Initial Frequency Tolerance	–	–	±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	
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	–	–	6	ns	CMOS Output, Load=15pf
	Load	–	15	–	–	pf
Supply Sensitivity	–	–	±5	ppb	V _{cc} ±5%	
Load Sensitivity	–	–	±5		Load±5%	
Aging per Day	–	–	±2		After 30 days of operation	
Aging per Year	–	–	±200		After 30 days of operation	
SSB Phase Noise @100MHz	–	–	-100	dBc/Hz	Offset 10Hz	@+25°C, 12V
	–	–	-130		Offset 100Hz	
	–	–	-160		Offset 1kHz	
	–	–	-170		Offset 10kHz	
	–	–	-170		Offset 100kHz	
Control Voltage Range	0	–	5	V		
Frequency Tuning Range	±0.5	–	±2.0	ppm		
Tuning Slope	positive					

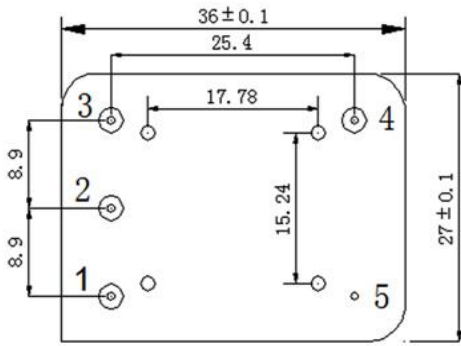
Environmental Conditions

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

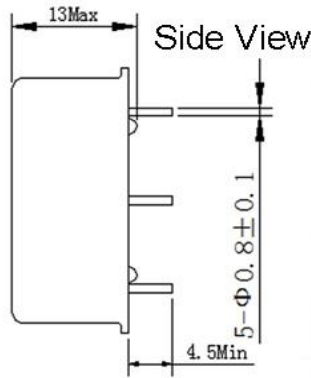
Reliability

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

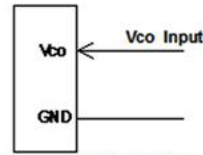
Outline Dimension & Pin Connections



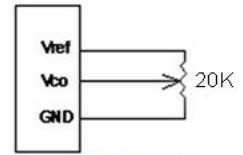
Bottom View



Side View



Using the external voltage



Using the variable resistor

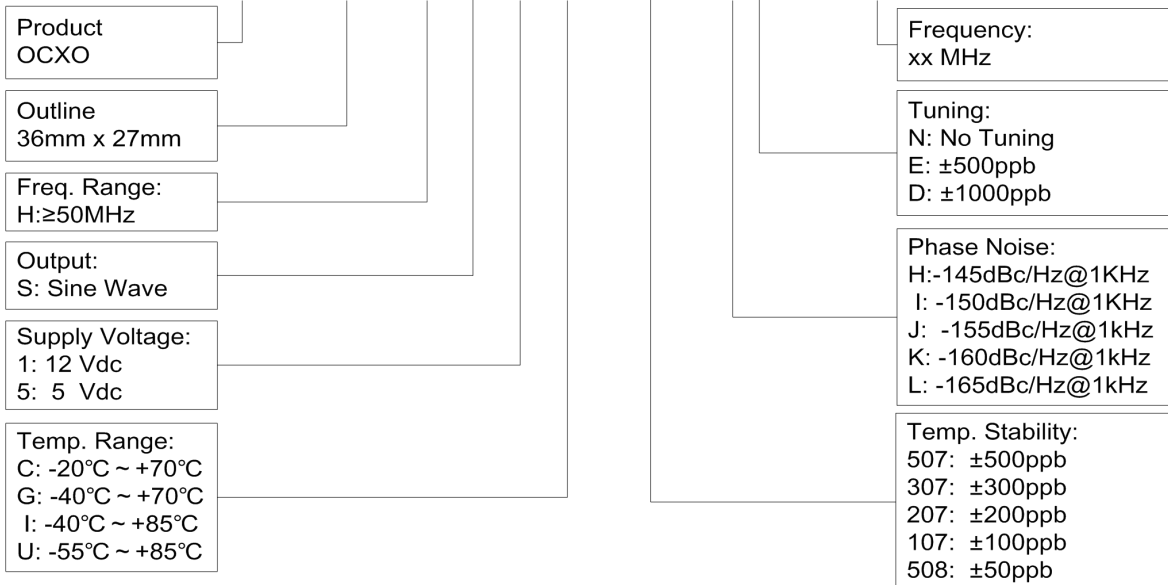
Pin Connections		
Pin1	Vcon	Control Voltage
Pin2	Vref	Reference Voltage
Pin3	Vdd	Power Supply
Pin4	Fout	Output
Pin5	GND	Ground, Case

Note:

1. Leave pin 1 unconnected if Vcon is not used.
2. Leave pin 2 unconnected if Vref is not used.
3. Reference connection of voltage control circuit.

Ordering Guide

BO 2736 H S X X XXX X X XX.XX



Example: BO2736HS5C107HN100