

**Features**

- Ultra Stable
- Wide Temperature Range
- DIP Package(25mm\*25mm)

**Applications**

- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics

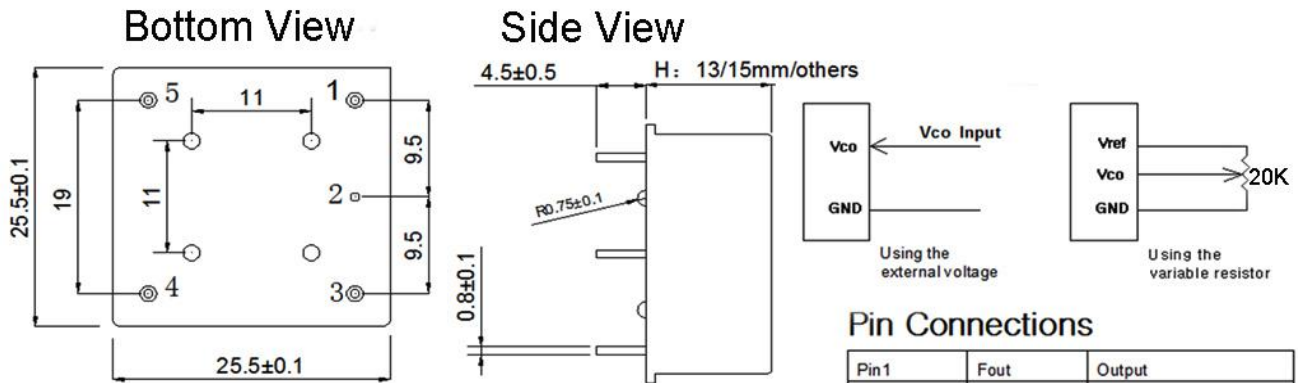

**BO2525L Specifications**

Parameter	Value			Unit	Condition	
	Min.	Typ.	Max.			
Supply Voltage	-	3.3	-	V		
	-	5.0	-	V		
	-	12.0	-	V		
Power Consumption	-	-	3.0	W	During Warming-up	
	-	-	1.0	W	Steady at +25°C & still air	
Frequency Range	10 ~ 40			MHz		
Nominal Frequency	10			MHz		
Initial Frequency Tolerance	-	-	±100	ppb	At shipment, nominal EFC	
Freq. Stability Vs. Temp.	±3	-	±10	ppb	-20°C ~ +70°C	
	±5	-	±10	ppb	-40°C ~ +70°C	
	±10	-	±50	ppb	-40°C ~ +85°C	
	-	-	±100	ppb	-55°C ~ +85°C	
Sine Wave	Output Level	7	-	-	dBm	
	Harmonics	-	-	-35	dBc	
	Spurious	-	-	-70	dBc	
	Load	-	50	-	Ω	
CMOS	V <sub>OH</sub>	2.4	-	-	V	CMOS Output, Load=15pf
	V <sub>OL</sub>	-	-	0.4	V	CMOS Output, Load=15pf
	Duty Cycle	45	-	55	%	(V <sub>OH</sub> - V <sub>OL</sub> )/2
	Rise/Fall edge	-	-	6	ns	CMOS Output, Load=15pf
	Load	-	15	-	pf	
Short-term Stability (1S)	-	-	5×10 <sup>-12</sup>		Test after 15 Min.	
Warm-up Time	-	-	10	Min	At +25°C, with accuracy of ±5ppb	
Supply Sensitivity	-	-	±2	ppb	V <sub>CC</sub> ±5%	
Load Sensitivity	-	-	±2		Load±5%	
Aging per Day	-	-	±0.5		After 30 days of operation	
Aging per Year	-	-	±50		After 30 days of operation	
SSB Phase Noise @10MHz	-	-	-120	dBc/Hz	Offset 10Hz	@+25°C
	-	-	-140		Offset 100Hz	
	-	-	-160		Offset 1kHz	
	-	-	-165		Offset 10kHz	
	-	-	-165		Offset 100kHz	
Control Voltage Range	0	-	5	V		
	0	-	12	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



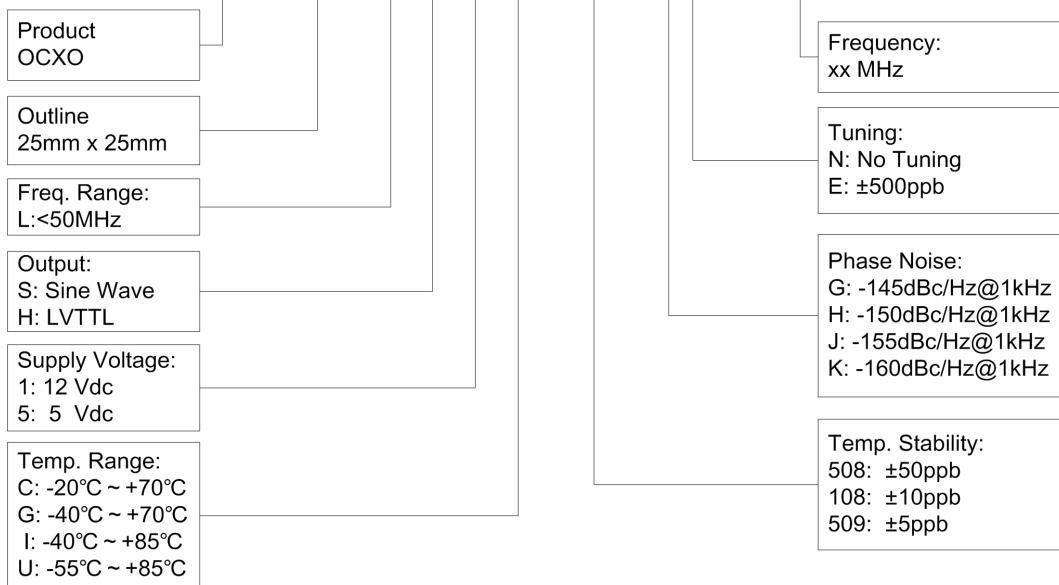
- Note:**
1. Leave pin 3 unconnected if Vcon is not used.
  2. Leave pin 4 unconnected if Vref is not used.
  3. Reference connection of voltage control circuit.

#### Pin Connections

Pin	Function	Notes
Pin1	Fout	Output
Pin2	GND	Ground Case
Pin3	Vcon	Control Voltage
Pin4	Ref.	Voltage Reference
Pin5	Vdd	Power Supply

### Ordering Guide

BO 2525 L X X X XXX X X XX.XX



**Example:** BO2525LH5C108HN10