Features

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

Applications

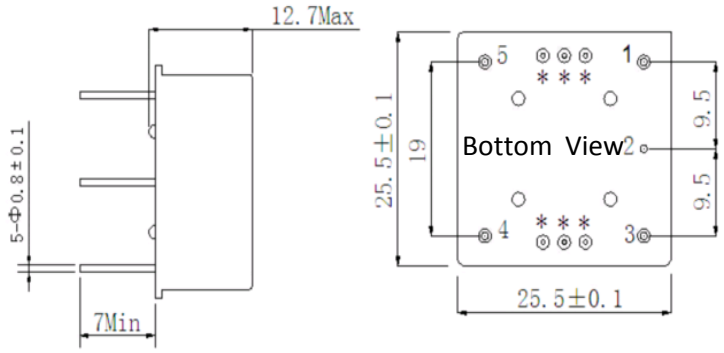
- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics

BN2525H Specifications

Parameter		Value			Unit	Condition	
		Min.	Typ.	Max.			
Power Supply							
Supply Voltage		11.4	12	12.6	Vdc		
Power Consumption		–	–	4.5	W	During Warming-up	
		–	–	1.5	W	Steady at +25℃ & still air	
RF Output							
Frequency Range			60 to 120		MHz		
Nominal Frequency			80,100		MHz		
Sine Wave	Output Level	8	–	–	dBm		
	Harmonics	–	–	-30	dBc		
	Spurious	–	–	-70	dBc		
	Load	–	50	–	Ω		
Frequency Stability							
Initial Frequency Tolerance		±100	–	±300	ppb	At shipment, nominal EFC	
Warm-up Time		–	–	5	Min	At +25℃, with accuracy of ±100ppb	
Freq. Stability Vs. Temp.			±50, ±100		ppb	-20℃ ~ +70℃	
			±50, ±100		ppb	-40℃ ~ +70℃	
			±100,±200		ppb	-40℃ ~ +85℃	
			±200,±500		ppb	-55℃ ~ +85℃	
Supply Sensitivity			±10		ppb	Vcc±5%	
Load Sensitivity			±10			Load±5%	
Aging per Day			±5,±10			After 30 days of operation	
Aging per Year			±500,±1000			After 30 days of operation	
SSB Phase Noise @100MHz		–	–	-100	dBc/Hz	Offset 10Hz	At +25℃
		–	–	-130		Offset 100Hz	
		–	-160	-155		Offset 1kHz	
		–	–	-170		Offset 10kHz	
		–	–	-170		Offset 100kHz	
Electronic Frequency Control							
Control Voltage Range			0 ~ 5 / 0~8		Vdc		
Frequency Turning Range			±500, ±1000		ppb		
Tuning Slope			positive				

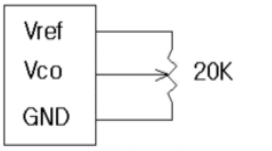
Outline Dimension & Pin Connections

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

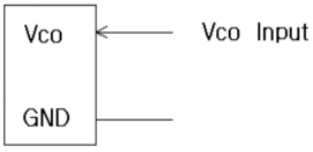


Note:

1. The pin with '*' are for factory test.
2. Leave pin 3 unconnected If Vcon is not used.
3. Leave pin 4 unconnected If Vref is not used.
4. Reference connection of voltage eontrol circiut.



Using the variable resistor



Using the external voltage

Environmental Conditions

Operating Temperature Range	-20℃～+70℃
	-40℃～+70℃
	-40℃～+85℃
	-55℃～+85℃

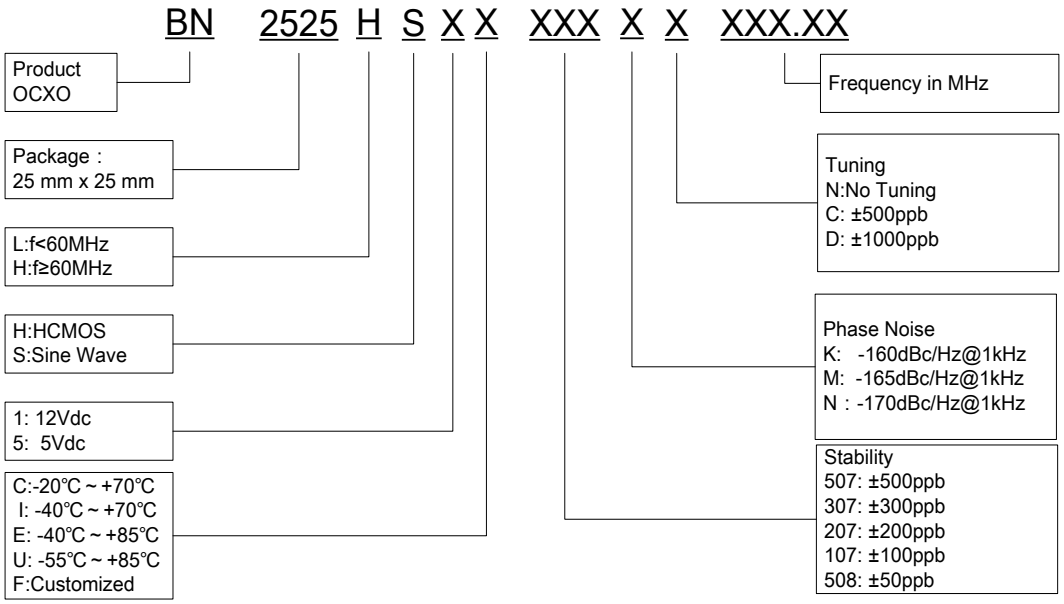
Maximum Ratings

Parameter	Symbol	Rating
Storage Temperature Range	Ts	-55℃~+125℃
Supply Voltage	Vdd	-0.3V/15V
Control Voltage	Vcon	0V/5V
ESD, HBM/CDM/MM		2KV /1KV / 200V

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

Ordering Guide



Example: BN2525HS1C107KN102.3

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