

Features

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

Applications

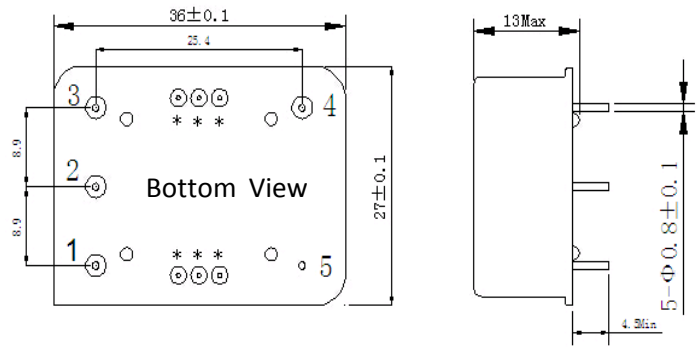
- Base Stations
- Instrumentations
- Synthesizer
- Medical Electronics


BN2736L Series Specifications

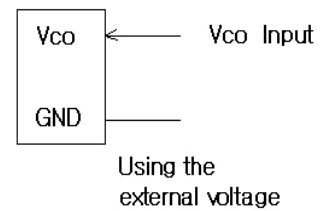
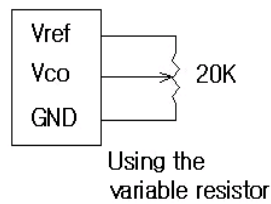
Parameter		Value			Unit	Condition	
		Min.	Typ.	Max.			
Power Supply							
Supply Voltage		11.4	12	12.6	Vdc		
Power Consumption		–	–	4.5	W	During Warming-up	
		–	–	1.5	W	Steady at +25℃ & still air	
RF Output							
Nominal Frequency		10			MHz		
Sine Wave	Output Level	7	–	–	dBm		
	Harmonious	–	–	-30	dBc		
	Spurious	–	–	-70	dBc		
	Load	–	50	–	Ω		
Frequency Stability							
Initial Frequency Tolerance		±10	–	±100	ppb	At shipment, nominal EFC	
Warm-up Time		–	–	5	Min	At +25℃, with accuracy of ±100ppb	
Freq. Stability Vs. Temp.		±10,±50, ±100			ppb	-20℃ ~ +70℃	
		±10,±50, ±100			ppb	-40℃ ~ +70℃	
		±50, ±100			ppb	-40℃ ~ +85℃	
		±50, ±100			ppb	-55℃ ~ +85℃	
Supply Sensitivity		±10			ppb	Vcc±5%	
Load Sensitivity		±10				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		–	–	-130	dBc/Hz	Offset 10Hz	At +25℃
		–	–	-150		Offset 100Hz	
		–	-165	-155		Offset 1kHz	
		–	–	-170		Offset 10kHz	
		–	–	-170		Offset 100kHz	
Electronic Frequency Control							
Control Voltage Range		0 ~ 5			Vdc		
Frequency Turning Range		±500			ppb		
Tuning Slope		positive					

Outline Dimension & Pin Connections

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


Note:

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


Environmental Conditions

Operating Temperature Range	-20°C ~ +70°C
	-40°C ~ +70°C
	-40°C ~ +85°C
	-55°C ~ +85°C

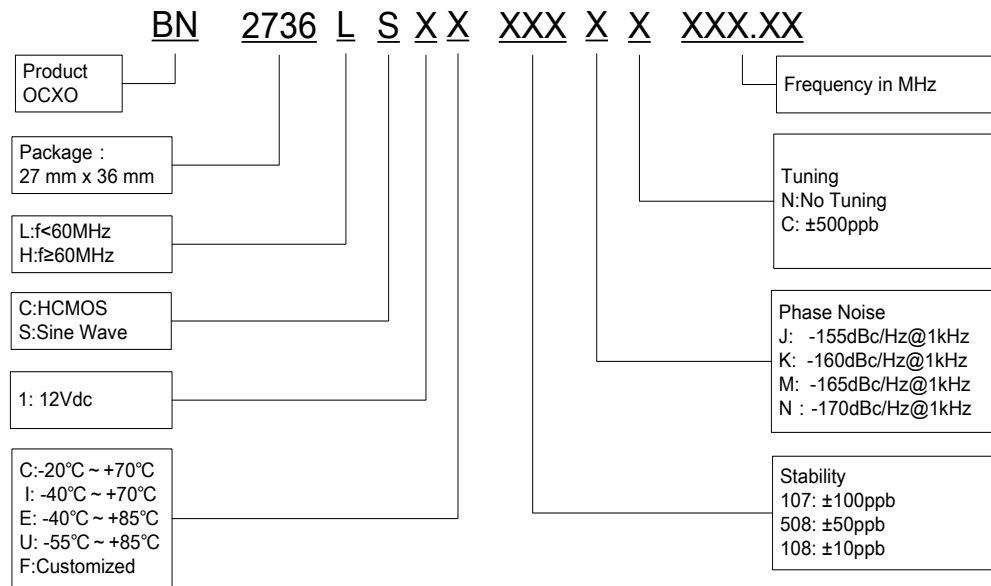
Maximum Ratings

Parameter	Symbol	Rating
Storage Temperature Range	Ts	-55°C ~ +125°C
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	RHOS Directive 2011/65/EU Annex II Recasting 2002/95/EC

Ordering Guide



Example: BN2736LS1C107MN10.23

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