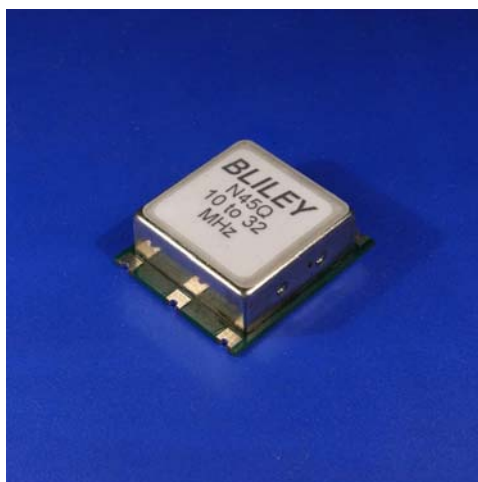


Description:

The N45Q Ovenized Crystal Oscillator Series offers high stability performance in a low profile package (0.31 inches max.) for base station, telecom infrastructure and network synchronization applications.



Features:

- Available in frequencies from 10 to 32 MHz
- LVC MOS or HCMOS output
- 3.3 or 5 volt supply
- RoHS-6/Leadfree compliant optional
- Rugged surface mount package for machine placement

Frequency Range, Operating Temperature, and Frequency Stability:

Frequency Range	Operating Temperature	Product Code	Frequency Stability	Product Code
10 to 32 MHz	0 to +50° C	A	+/- 30 ppb	A
	0 to +70° C	B	+/- 50 ppb	B
	-20 to +70° C	C	+/- 75 ppb	C
	-40 to +85° C	D	+/- 90 ppb	D

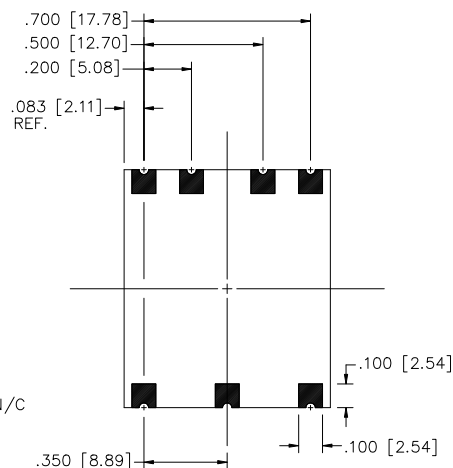
* +/-30 ppb is not available with -40 to +85° C operating temperature range.
 ** For different frequency stabilities and other temperature ranges, consult Bliley Sales.

Aging: (typical at 10 MHz after 30 days continuous operation)

Frequency	Timeframe	Aging
All	1 Year	Less than +/- 100 ppb

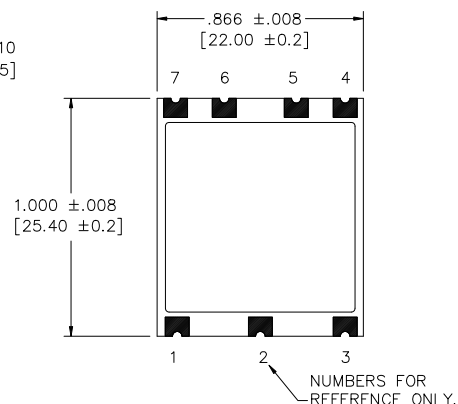
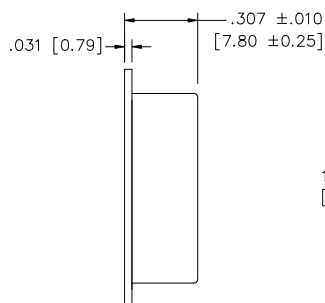
Phase Noise:

Frequency Offset	Square Wave
1 Hz	-80 dBc/Hz
10 Hz	-115 dBc/Hz
100 Hz	-145 dBc/Hz
1 KHz	-150 dBc/Hz
10 KHz	-155 dBc/Hz
100 KHz	-155 dBc/Hz



PIN CONNECTIONS

1. VOLTAGE CONTROL OR N/C
2. N/C
3. +VDC
4. OUTPUT
5. N/C
6. N/C
7. RF & CASE GROUND



Supply Voltage & Power Consumption:

Supply Voltage	3.3V +/- 5%	5V +/- 5%
Power Consumption	4.0 W turn on power 1.2W steady state power	4.0 W turn on power 1.2W steady state power
Product Code	A	B

Output Waveform:

HCMOS	
Waveform Description	
HCMOS Output Levels (15pf load)	"0" < 0.5V; "1" > 4.5V
Rise / Fall Time	<10ns (10% to 90%)
Duty Cycle	45% to 55% @ 50% Logic 1

Pulling Range:

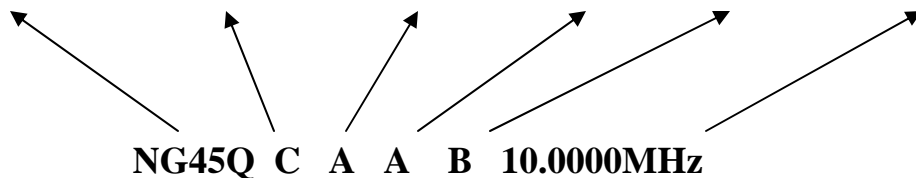
Tuning Range (0V to Vsupply on Vcontrol)	None	+/- 1ppm min
Product Code	A	B

Environmental:

Storage Temperature	-55 to 125° C
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Ordering Options:

Type, Package Style, and Lead-Free /Leaded	Operating Temp.	Frequency Stability	Supply Voltage	Pulling Range	Operating Frequency
N45Q NG45Q / RoHS Compliant	A	A	A	A	xx.xxxxMHz
	B	B	B	B	
	C	C			
	D	D			



Product Selection Code (refer to the above example):

This part is RoHS compliant, -20C to +70C, +/- 30 ppb frequency vs. temperature stability referenced to 25C, 3.3V supply, +/- 1ppm minimum pull, and a 10 MHz operating frequency