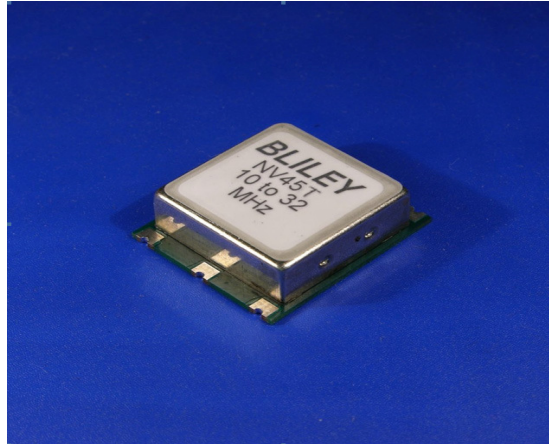


### Description:

The N45T 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  
 HCMOS or Sinewave 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	<b>A</b>	+/- 30 ppb	<b>A</b>
	0 to +70° C	<b>B</b>	+/- 50 ppb	<b>B</b>
	-20 to +70° C	<b>C</b>	+/- 75 ppb	<b>C</b>
	-40 to +85° C	<b>D</b>	+/- 90 ppb	<b>D</b>

- +/-30 ppb is not available over -40 to +85° C operating temperature range.

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

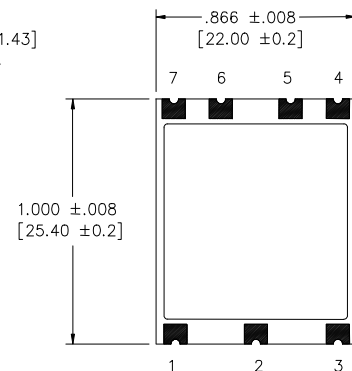
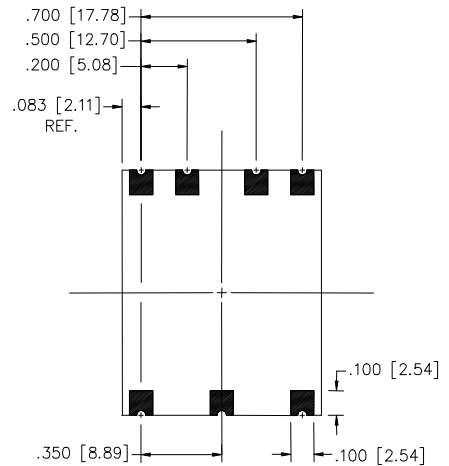
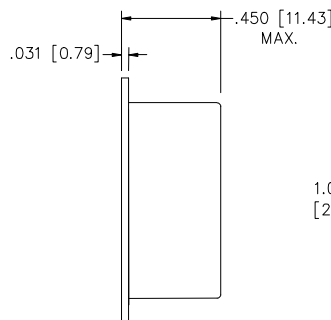
Frequency	Timeframe	Aging
All	1 Year	Less than +/- 100 ppb

### Phase Noise:

Frequency Offset	@10MHz
1 Hz	-85 dBc/Hz
10 Hz	-120 dBc/Hz
100 Hz	-145 dBc/Hz
1 KHz	-150 dBc/Hz
10 KHz	-155 dBc/Hz
100 KHz	-155 dBc/Hz

### PIN CONNECTIONS

- VOLTAGE CONTROL OR N/C
- N/C
- +VDC
- OUTPUT
- N/C
- N/C
- 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:

Product Code	
A	B
<b>HCMOS (15pF Load)</b>	<b>Sine Wave (50Ω Load)</b>
Logic "0" < 0.5V	Power 7dBm Typical
Logic "1" > 4.5V	Harmonics <-30dBc
Rise / Fall Time <10ns (10% to 90%)	Spurs <-60dBc
Duty Cycle 45% to 55% @ 50% Logic 1	

### Pulling Range:

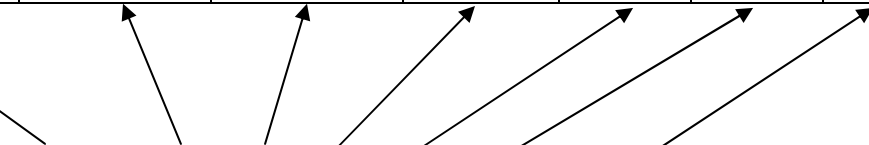
Tuning Range ( 0V to Vsupply on Vcontrol )	None	+/- 1ppm min
Product Code	A	B

### 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	Output Type	Pulling Range	Operating Frequency (MHz)
N45T NG45T / RoHS Compliant	A	A	A	A	A	xxMx
	B	B	B	B	B	
	C	C				
	D	D				


  
**NG45T C A A B B 15M6**

### Product Selection Code (refer to the above example):

This part is RoHS compliant, -20C to +70C, +/- 30 ppb Freq vs Temp Stability, 3.3V supply, HCMOS output, +/- 1ppm pull, operating at 15.60MHz output frequency.