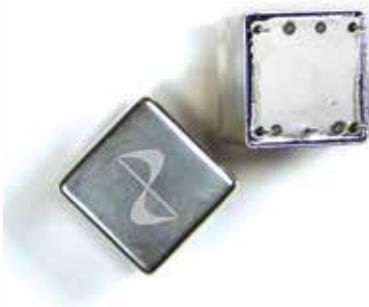


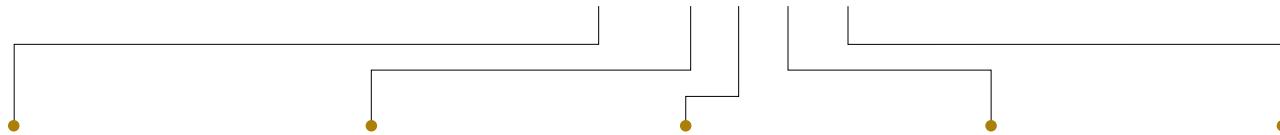
## VN03-Series Specifications



**25.80L x 25.80W x 16.81H (mm)  
1.015L x 1.015W x 0.662H (in)**

PDI VN03-Series Oven Controlled Crystal Oscillators (OCXO) ensures precise frequency under the most demanding circumstances. With low phase noise, performance in high vibration environments, and double-hermetically sealed quartz crystal, this OCXO can also be made available in custom frequencies. PDI provides fast sampling for your proto-typing needs, mass production capability, and competitive pricing.

ex) **VN03-12000X-C-R-D-12-XX\***



**FREQUENCY**

**10000X – 50000X =**  
10.000MHz – 50.000MHz

**OUTPUT**

**C** = TTL/CMOS  
**W** = Sinewave

**FREQUENCY STABILITY**

**O** = +/-5 PPB \*\*  
**P** = +/-10 PPB  
**Q** = +/-20 PPB  
**R** = +/-50 PPB  
**T** = +/-100 PPB  
**S** = Special

**OPERATING TEMPERATURE**

**A** = 0 to +70°C  
**B** = -20 to +70°C  
**F** = -20 to +90°C  
**D** = -40 to +85°C  
**G** = -40 to +90°C  
**S** = Special

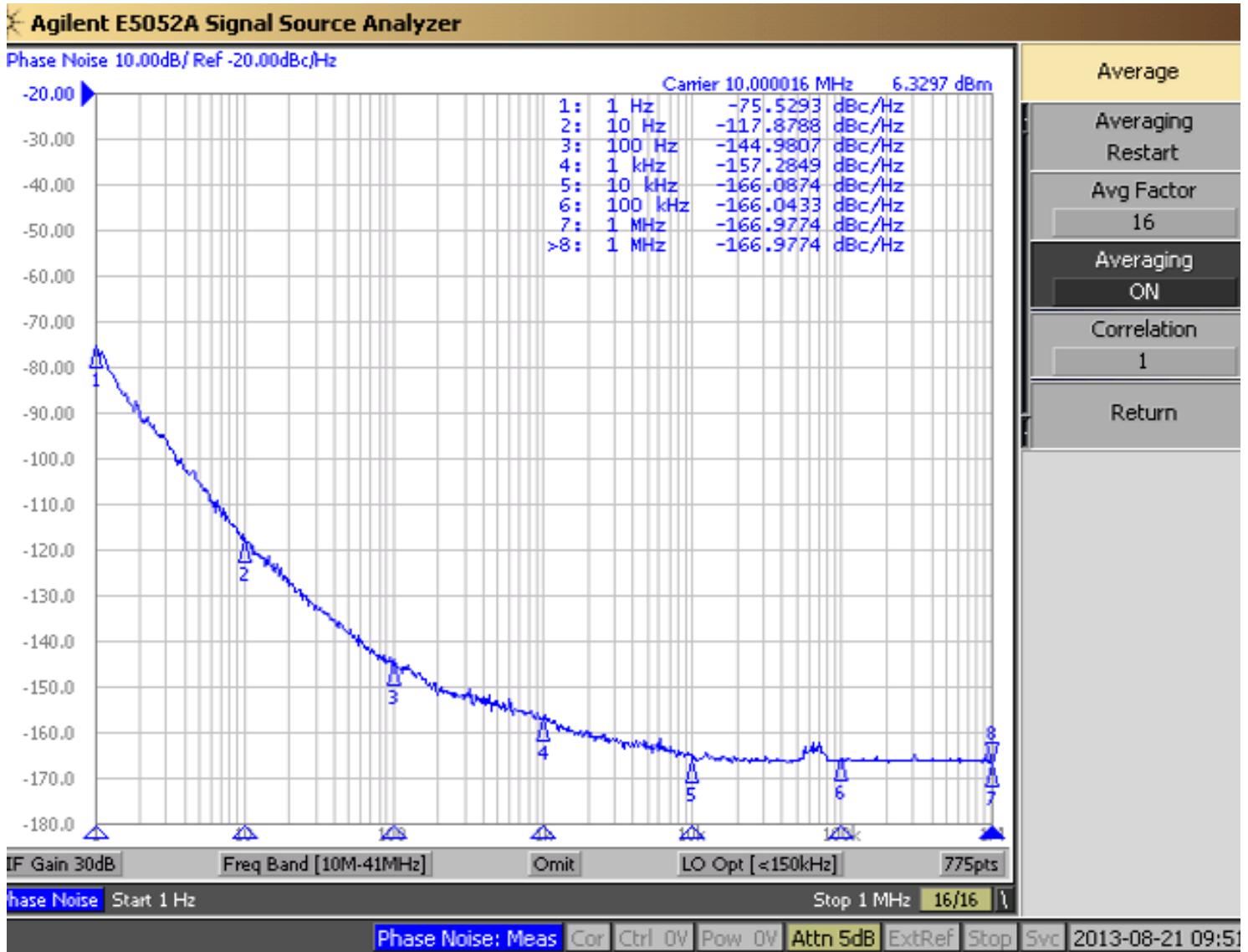
**SUPPLY VOLTAGE**

**5** = 5.0  
**12** = 12.0  
**15** = 15.0  
**28** = 28.0

\*\* - Only available with A and B Operating Temperature Options. \* - for standard or assigned for customization.

Parameter	Supply Voltage Range ( $\pm 5\%$ )	Units
	5.0 to 28.0	
Frequency Range	10.000000 to 50.000000	MHz
Frequency Stability	vs Temperature (Max.)	ppb
	vs Supply Voltage (Max. for a 5% charge)	
	vs Load (Max. for a 10% charge)	
	vs Aging (Max. per year)	
	Calibration (@ +25°C) 3 Minutes After Switch On (Max.)	
Temperature Range	Operating	°C
	Storage	
Frequency Adjustment	Frequency Tuning (Min.)	ppb
	Voltage Control Range	
	Reference Voltage Output ( $\pm 2.0\%$ )	
	Slope	
	Linearity (Max.)	
Supply Power	During 3 Minutes After Switch On (Max.)	W
	Steady State @ 25°C (Max.)	
Output	TTL/CMOS	V
	Sinewave	
Load ( $\pm 10\%$ )	TTL/CMOS	dBm
	Sinewave	
Phase Noise (Typical) (10MHz @ +12Vdc)	@ 1 Hz	dBc/Hz
	@ 10 Hz	
	@ 100 Hz	
	@ 1 kHz	
	@ 10 kHz	
	@ 100kHz	

## PHASE NOISE PLOT



### NOTES:

All product supplied in anti-static packaging.

All product is supplied *RoHS* and *REACH* compliant.

All tests are performed in Still Air test conditions, unless otherwise stated.

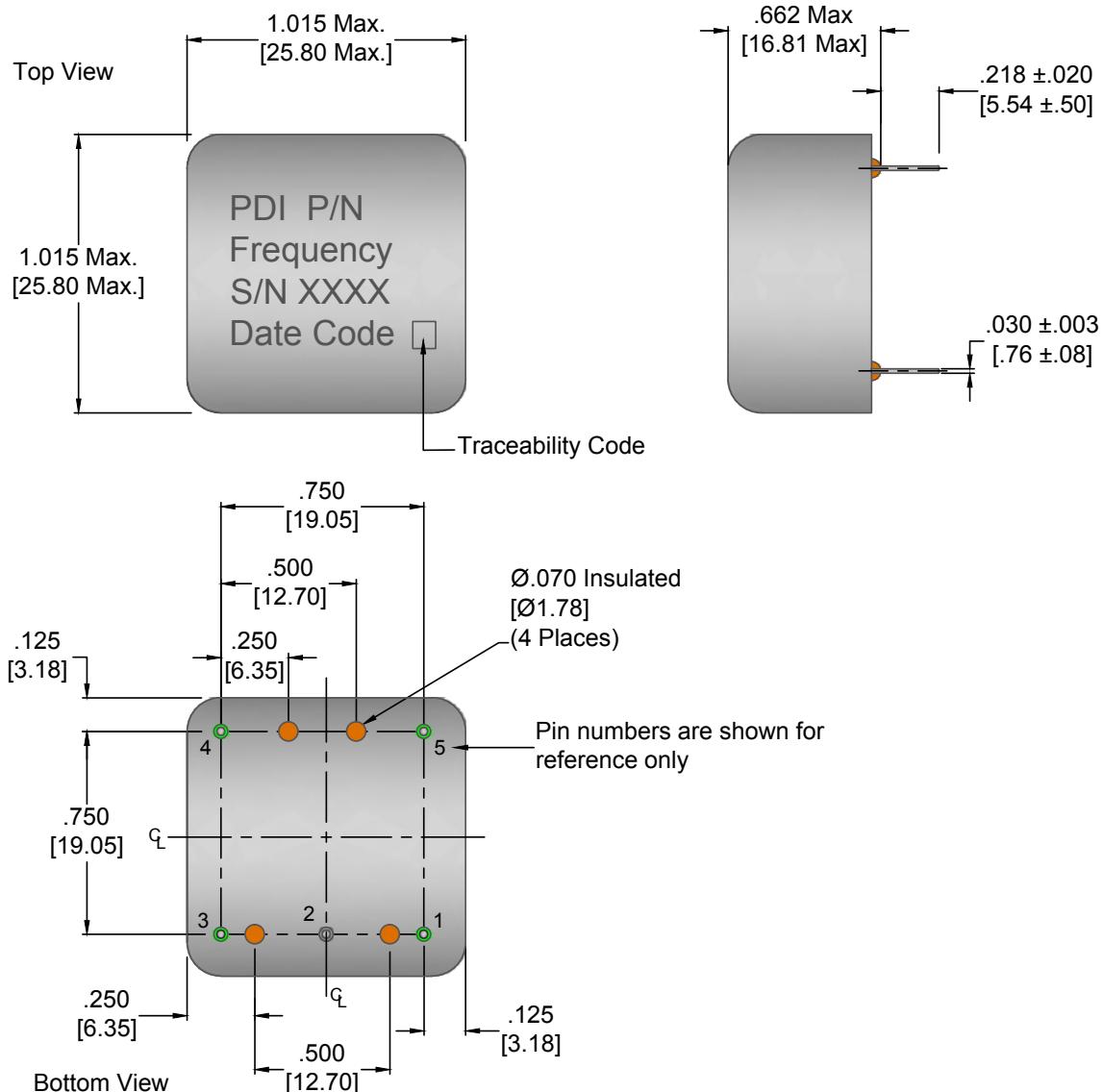
Specifications subject to change without notice, last updated 4/1/13.

**VN03-Series 25.80 x 25.80 x 16.81 (mm)**

## PACKAGE DIMENSIONS

**Tolerance:  $\pm .008$  [.20mm] (Unless otherwise specified)**

PIN	CONNECTION
1	Output
2	Ground/Case
3	EFC or No Connect
4	Vref or No Connect
5	Supply Voltage



## NOTES:

All product supplied in anti-static packaging.

All product is supplied *RoHS* and *REACH* compliant.

All tests are performed in Still Air test conditions, unless otherwise stated.

Specifications subject to change without notice, last updated 4/1/13.