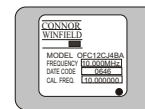


CRYSTAL CONTROLLED OSCILLATORS

12.00V SINEWAVE OCXO



ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-40	-	85	°C	
Supply Voltage	(Vcc)	-0.5	-	12.6	Vdc	

OPERATING SPECIFICATIONS

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Center Frequency	(Fo)		10		MHz	
Frequency Calibration		-0.2		0.2	ppm	1
Frequency Stability		-20	-	20	ppb	2
Aging: Daily		-	-	1	ppb/day	3
Aging: First Year		-	-	50	ppb	
Aging: Long Term (20 Years)		-	-	500	ppb	
Operating Temperature Range		-40	-	70	°C	
Supply Voltage	(Vcc)	11.40	12.00	12.60	Vdc	
Voltage Stability (+/-1%)		-2	-	2	ppb	
Load Stability (+/-10%)		-0.5	-	0.5	ppb	
Allan Variance (1 second)		-	2.00E-11	-		
Period Jitter		-	-	3	ps rms	
Power Consumption: Turn On		-	-	3.50	W	4
Power Consumption: Steady-State		-	-	2.00	W	4
Start-Up Time				500	mS	5
Warm Up		-100	-	100	ppb	6
2G Tip-over		-	5	-	ppb/G	

SINEWAVE OUTPUT CHARACTERISTICS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		45	50	55	ohms	
Output Power		5.0	-	12	dBm	
Spurious Output				-80	dBc	
SSB Phase Noise at 1Hz offset		-	-85	-	dBc/Hz	
SSB Phase Noise at 10Hz offset		-	-115	-	dBc/Hz	
SSB Phase Noise at 100Hz offset		-	-140	-	dBc/Hz	
SSB Phase Noise at 1KHz offset		-	-150	-	dBc/Hz	
SSB Phase Noise at 10KHz offset		-	-155	-	dBc/Hz	
SSB Phase Noise at 100KHz offset		-	-155	-	dBc/Hz	

RESTALLIZATION TIME

TABLE 4.0

Off Time	Restabilization Time	NOTE
< 1 Hour	< 2 Hours	7
< 6 Hours	< 12 Hours	7
< 24 Hours	< 48 Hours	7
1 to 16 Days	48 Hours + ¼ Off Time	7
> 16 Days	< 6 Days	7

PACKAGE CHARACTERISTICS

TABLE 5.0

Package	Metal package: solder sealed, grounded case, solder tinned pins.
Soldering Process	See solder profile on page 2.

ENVIRONMENTAL CHARACTERISTICS

TABLE 6.0

Shock	100G's, 6mS, halfsine per MIL-STD-202F, Method 213B, Test Condition C
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OFC12CJ4BA

DESCRIPTION

The Connor Winfield OFC12CJ4BA is a 12.00V Oven Controlled Crystal Oscillator (OCXO) with a Sinewave output. The OFC12CJ4BA is designed for applications requiring tight frequency stability and low noise.

FEATURES

OCXO

12.00V OPERATION

DESIGNED FOR TIGHT FREQUENCY STABILITY APPLICATIONS

FREQUENCY STABILITY: 20ppb ABSOLUTE

TEMPERATURE RANGE: -40 to 70C

SINEWAVE OUTPUT

RoHS 5/6 COMPLIANT

ORDERING INFORMATION

OFC12CJ4BA - 10.00MHz

OCXO SERIES

CENTER FREQUENCY

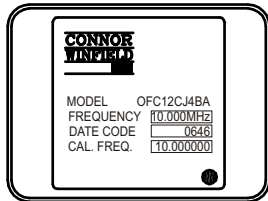
Specifications subject to change without notice.

CRYSTAL CONTROLLED OSCILLATORS

Notes:

- 1) Initial calibration @ 25 C, at time of shipment.
- 2) Frequency vs. temperature stability referenced to 25 C.
- 3) After ten days of continuous operation.
- 4) Vcc = 12.00Vdc.
- 5) From Vcc=90% of final value. No more than 16 transitions at start-up before oscillator has started.
- 6) Measured @ 0 C, within 5 minutes, referenced one hour after turn-on.
- 7) For a given off time, the time required to meet daily aging, short-term stability requirements.

Labeling Diagram

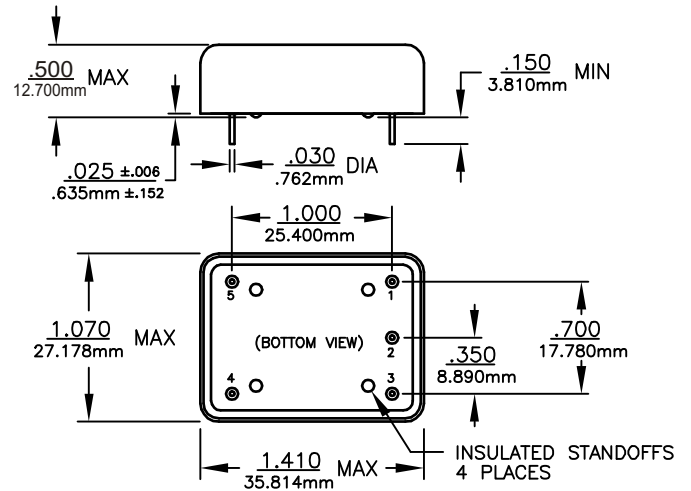


Pin Connections

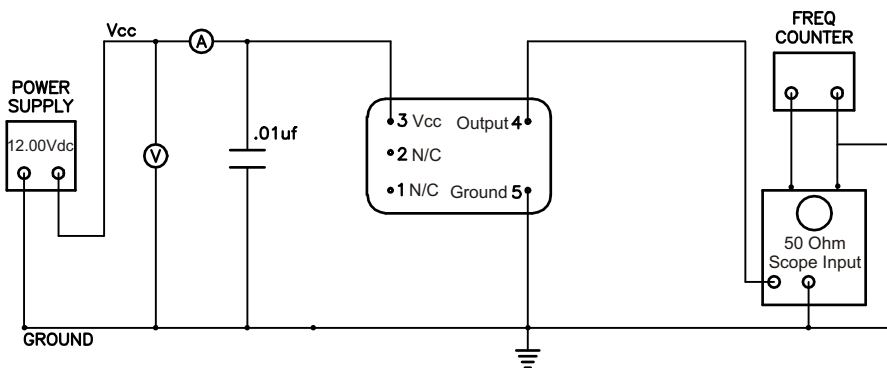
TABLE 7.0

Pin	Function
1	N/C
2	N/C
3	Supply Voltage (Vcc)
4	Output
5	Circuit and Case Ground

Package Layout



Test Diagram



Solder Profile

