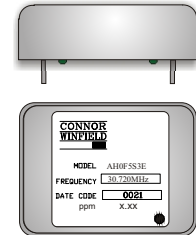


CRYSTAL CONTROLLED OSCILLATORS

STRATUM 3E HCMOS OCXO



ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-40	-	85	°C	
Supply Voltage	(Vcc)	-0.5	-	7	Vdc	

OPERATING SPECIFICATIONS

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Center Frequency	(Fo)	9.72	-	30.72	MHz	
Frequency Calibration		-1	-	1	ppm	1, 2
Frequency Stability vs. Temperature		-10	-	10	ppb	3
Aging: Daily		-1	-	1	ppb/day	4
Aging: First Year		-50	-	50	ppb	4
Aging: Short Term (1Sec.)		-	5.00E-11	-	RMS	5
Operating Temperature Range		-20	-	70	°C	
Supply Voltage	(Vcc)	4.75	5.00	5.25	Vdc	
Voltage Stability (+/-1%)		-0.5	-	0.5	ppb	6
Load Stability (+/-10%)		-0.5	-	0.5	ppb	7
Power Consumption: Turn On		-	-	2.00	W	8
Power Consumption: Steady-State		-	-	1.00	W	2, 8
Start-Up Time		-	-	500	mS	9
Warm Up		-50	-	50	ppb	10
2G Tip-over		-	-	5	ppb/G	

HCMOS OUTPUT CHARACTERISTICS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		18	20	22	pF	11
Voltage (High)	(Voh)	4.2	-	-	Vdc	
Voltage (Low)	(Vol)	-	-	0.4	Vdc	
Duty Cycle at 50% of Vcc		40	50	60	%	
Rise / Fall Time 10% to 90%		-	-	5	nS	
SSB Phase Noise at 10Hz offset		-	-	-110	dBc/Hz	
SSB Phase Noise at 100Hz offset		-	-	-135	dBc/Hz	
SSB Phase Noise at 1KHz offset		-	-	-145	dBc/Hz	
SSB Phase Noise at 10KHz offset		-	-	-150	dBc/Hz	

RESTALLIZATION TIME

TABLE 4.0

Off Time	Restabilization Time	NOTE
< 1 Hour	< 2 Hours	12
< 6 Hours	< 12 Hours	12
< 24 Hours	< 48 Hours	12
1 to 16 Days	48 Hours + 1/4 Off Time	12
> 16 Days	< 6 Days	12

PACKAGE CHARACTERISTICS

TABLE 5.0

Package	Metal package: solder sealed, grounded case, solder tinned pins.
---------	--

ENVIRONMENTAL CHARACTERISTICS

TABLE 6.0

Shock	100G's, 6mS, halfsine per MIL-STD-202F, Method 213B, Test Condition C
Vibration	0.06" D.A. or 10G peak 10 to 500 Hz, per MIL-STD-202F, Method 204D, Test condition A

Notes:

- Labels will include the calibration frequency at the time of shipment
- Measured @ 25 C
- Frequency vs. temperature stability referenced at 25 C.
- After ten days of continuous power.
- Allen Variance: 1 second, 100 average.
- Frequency vs. change in supply voltage.
- Frequency vs. change in load.
- Vcc = 5.0Vdc.
- From Vcc=90% of final value. No more than 16 transitions at start-up before oscillator has started.
- Measured @ -20 C, within 10 minutes, referenced one hour after turn-on.
- Two HCMOS loads
- For a given off time, the time required to meet daily aging, short term stability requirements.

AHOF5S3E

DESCRIPTION

The Connor-Winfield AHOF5S3E is a 5V Oven Controlled Crystal Oscillator (OCXO) with HCMOS output. The AHOF5S3E is designed for Stratum 3E applications requiring low jitter and tight frequency stability.

FEATURES

- DESIGNED TO MEET STRATUM 3E REQUIREMENTS
- TEMPERATURE STABILITY ±10ppb
- 5.0V OPERATION
- HCMOS OUTPUT

ORDERING INFORMATION

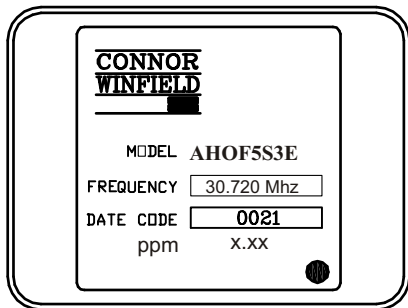
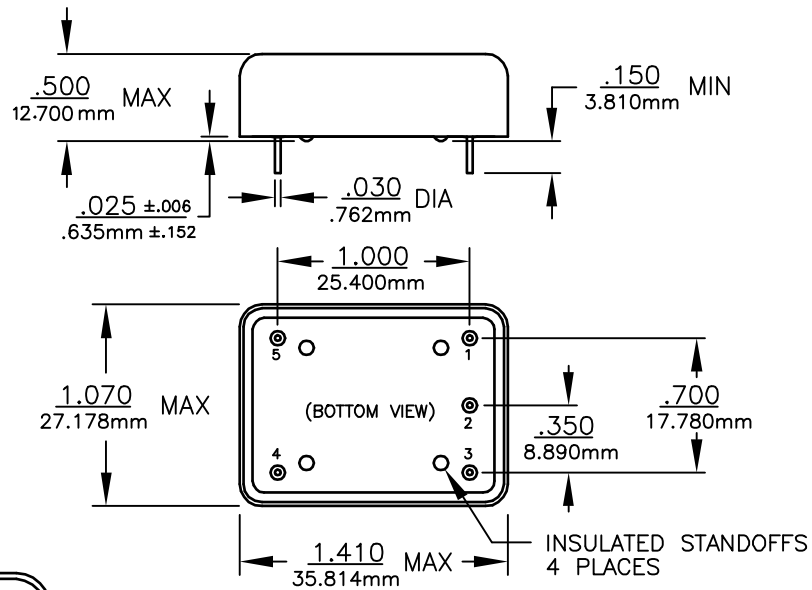
AHOF5S3E - 30.720MHz

OCXO
SERIES

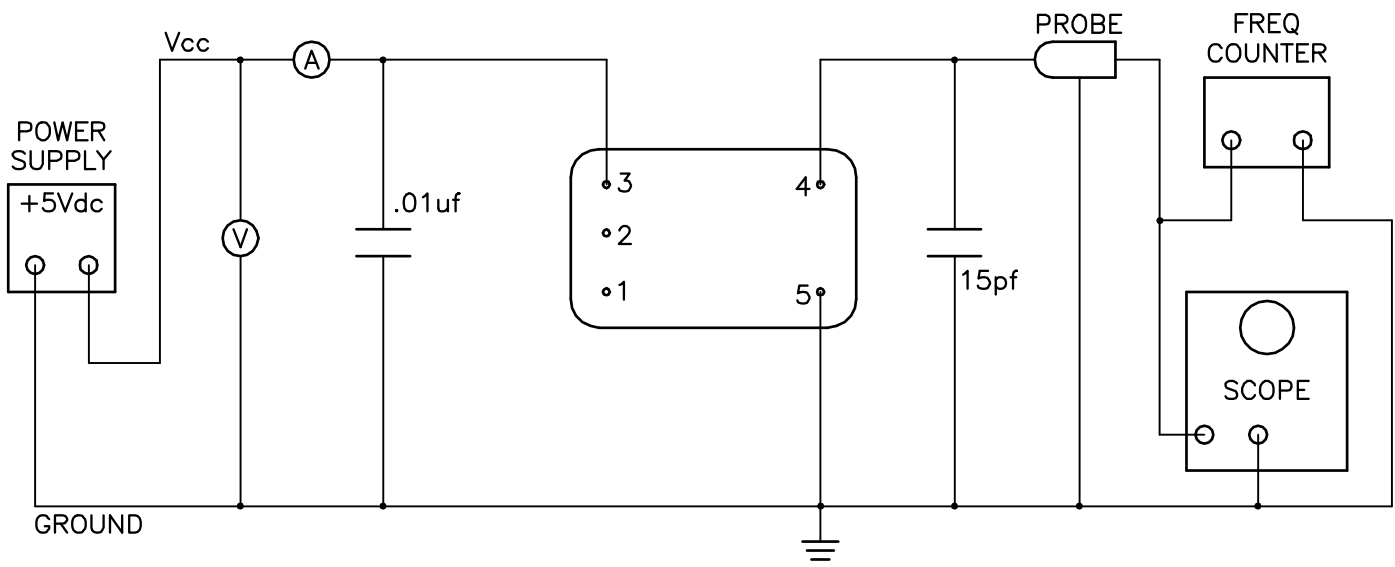
CENTER
FREQUENCY

Specifications subject to change without notice.

CRYSTAL CONTROLLED OSCILLATORS



PIN	CONNECTION
1	NO CONNECT
2	NO CONNECT
3	SUPPLY VOLTAGE
4	RF OUTPUT
5	CIRCUIT AND PACKAGE GROUND



Specifications subject to change without notice.