CONNOR WINFIELD

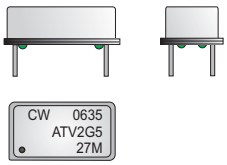
THE CONNOR-WINFIELD CORP.
2111 COMPREHENSIVE DRIVE.
AURORA, IL 60505.
FAX (630) 851-5040.
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PRODUCT DATA SHEET

RoHS-5/6 COMPLIANT

CRYSTAL CONTROLLED OSCILLATORS

5.0V 14 Pin DIP HCMOS TCXO



ATV2G5

ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	
Supply Voltage	(Vcc)	-0.5	-	6	Vdc	
Control Voltage	(Vc)	-0.5	-	Vcc+0.5	Vdc	

OPERATING SPECIFICATIONS

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	2	-	50	MHz	
Frequency Stability vs. Temperature		-1.0	-	1.0	ppm	1
Total Frequency Tolerance		-8.0	-	8.0	ppm	2
Operating Temperature Range		0	-	50	°C	
Supply Voltage	(Vcc)	4.75	5.0	5.25	Vdc	
Supply Current	(Icc)	-	15	35	mA	
Jitter (BW=10Hz to 20MHz)		-	3	5	ps rms	
Jitter (BW=12kHz to 20MHz)		-	-	1	ps rms	
SSB Phase Noise at 10Hz offset		-	-75	-	dBc/Hz	
SSB Phase Noise at 100Hz offset		-	-100	-	dBc/Hz	
SSB Phase Noise at 1KHz offset		-	-125	-	dBc/Hz	
SSB Phase Noise at 10KHz offset		-	-135	-	dBc/Hz	
SSB Phase Noise at 100KHz offset		-	-140	-	dBc/Hz	

INPUT CHARACTERISTICS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Control Voltage	(Vc)	0.5	2.5	4.5	Vdc	
Frequency Adjust Range (0.5 to 4.5V)		±8.0	-	-	ppm	3
Frequency Adjust Linearity		-15	-	15	%	
Input Impedance		10k	-	-	Ohm	

HCMOS OUTPUT CHARACTERISTICS

TABLE 4.0

PARAMETER			MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD				-	-	50	pF	
Voltage	(High)	(Voh)	4.5	-	-	Vdc	
	(Low)	(Vol)	-	-	0.4	Vdc	
Current	(High)	(Ioh)	-16	-	-	mA	
	(Low)	(Ioh)	-	-	16	mA	
Duty Cycle at 50% of Vcc			40	50	60	%	
Rise / Fall Time 10% to 90%			-	3	6	nS	

PACKAGE CHARACTERISTICS

TABLE 5.0

Package	Hermetically sealed, metal package.

Note:
1) Vcc = 5.0V, Vc = 2.50V
2) Inclusive of calibration, frequency vs. temperature stability, supply voltage change, load change, shock and vibration, 10 years aging. Vc = 2.50V
3) Referenced to Fo, Positive Slope.

DESCRIPTION

The Connor-Winfield ATV2G5 is a 14 Pin DIP, 5.0V HCMOS Voltage Controlled Temperature Compensated Crystal Oscillator (VCTCXO). The ATV2G5 is designed for use in applications requiring tight frequency stability.

FEATURES

5.0V OPERATION

LOW JITTER <1ps RMS

FREQUENCY STABILITY: ±1.0ppm

TEMPERATURE RANGE: 0 to 50°C

TOTAL FREQUENCY TOLERANCE: ±8.0ppm

HERMETICALLY SEALED DIP PACKAGE

RoHS 5/6 COMPLIANT

ORDERING INFORMATION

ATV2G5 - 027.0 M

TCXO SERIES

CENTER FREQUENCY

Specifications subject to change without notice.

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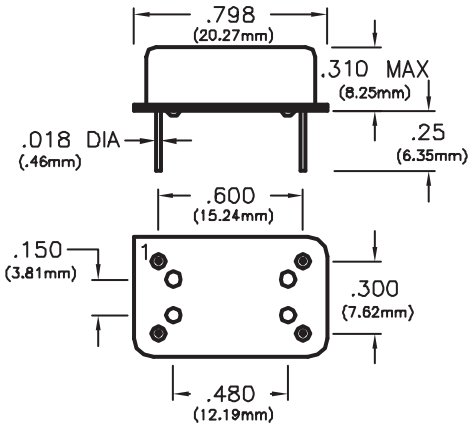
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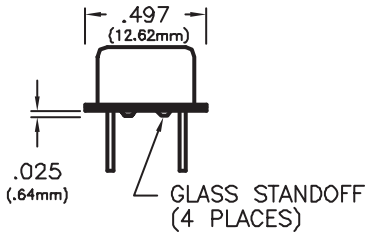
RoHS-5/6 COMPLIANT

PRODUCT DATA SHEET

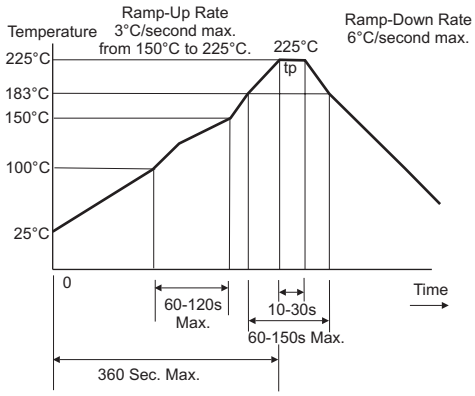
CRYSTAL CONTROLLED OSCILLATORS

Package Outline





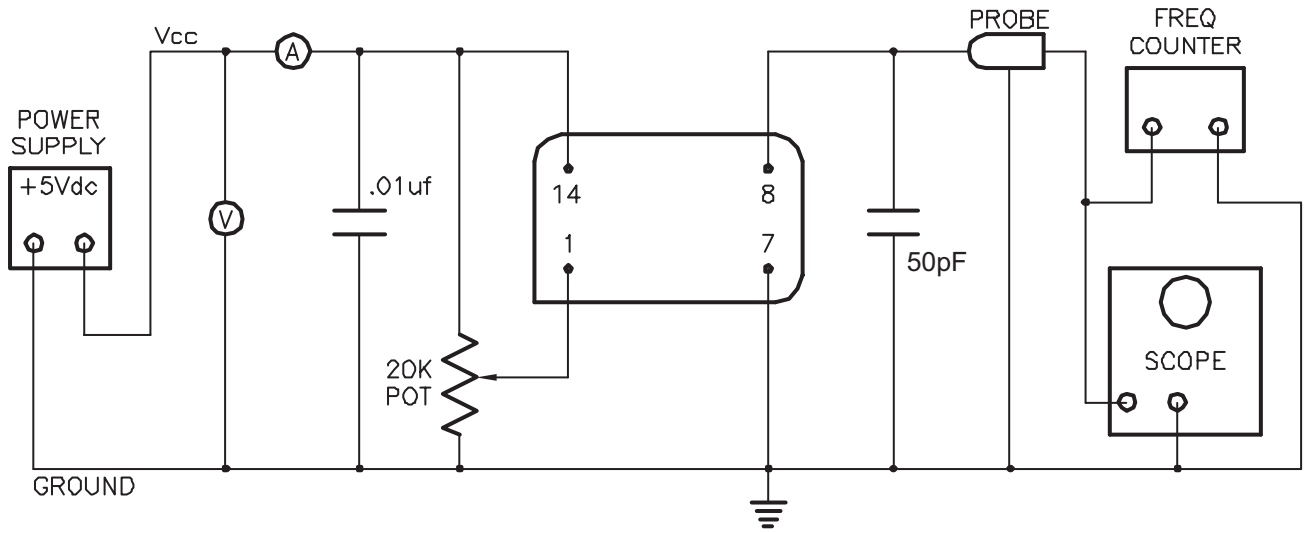
Solder Profile



Pin Connections

PIN	CONNECTION
1	FREQUENCY ADJUST
7	GROUND (CASE)
8	OUTPUT
14	(+) SUPPLY

Test Circuit



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