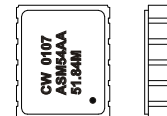


# CRYSTAL CONTROLLED OSCILLATORS

## 3.3V SURFACE MOUNT CRYSTAL CLOCK OSCILLATOR



ASM51AA, ASM52AA  
ASM53AA, ASM54AA

### ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	
Supply Voltage	(Vcc)	-0.5	-	7.0	Vdc	

### MODEL SPECIFICATIONS:

TABLE 2.0

#### MODEL ASM54AA

Frequency Range	(Fo)	13	-	80	MHz	
Frequency Tolerance:		-20	-	20	ppm	1

#### MODEL ASM51AA

Frequency Range	(Fo)	13	-	80	MHz	
Frequency Tolerance:		-25	-	25	ppm	1

#### MODEL ASM52AA

Frequency Range	(Fo)	13	-	80	MHz	
Frequency Tolerance:		-50	-	50	ppm	1

#### MODEL ASM53AA

Frequency Range	(Fo)	13	-	80	MHz	
Frequency Tolerance:		-100	-	100	ppm	1

### OPERATING SPECIFICATIONS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Operating Temperature Range		0	-	70	°C	
Supply Voltage	(Vdd)	2.97	3.3	3.63	Vdc	
Supply Current	(Icc)	-	10	50	mA	

### ACMOS OUTPUT CHARACTERISTICS

TABLE 4.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	50	pF	
Voltage (High)	(Voh)	Vcc - 0.5	-	-	Vdc	
(Low)	(Vol)	-	-	0.44	Vdc	
Current (High)	(Ioh)	-24	-	-	mA	
(Low)	(Iol)	-	-	24	mA	
Duty Cycle at 2V		45	50	55	%	
Rise / Fall Time 10% to 90%		-	1	3	nS	
Start-Up Time		-	-	10	mS	
Jitter (BW=10Hz to 20MHz)		-	-	5	ps rms	
Jitter (BW=12kHz to 20MHz)		-	-	1	ps rms	

### PACKAGE CHARACTERISTICS

TABLE 5.0

Package	Hermetically sealed ceramic package and metal cover
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Note:

- Inclusive of calibration @ 25°C, frequency vs. temperature stability, supply voltage change, load change, shock and vibration, 10 years aging.

### DESCRIPTION

The Connor-Winfield models ASM51AA, ASM52AA, ASM53AA and ASM54AA are 3.3V acmos, Surface Mount, Fixed Frequency Crystal Oscillators (XO) designed for use in all applications requiring precision clocks.

### FEATURES

13 to 80 MHz

3.3V OPERATION

OVERALL FREQUENCY TOLERANCE:

ASM54AA ±20ppm  
ASM51AA ±25ppm  
ASM52AA ±50ppm  
ASM53AA ±100ppm

TEMPERATURE RANGE: 0° to 70°C

CERAMIC SURFACE MOUNT PACKAGE

TAPE AND REEL PACKAGING

### ORDERING INFORMATION

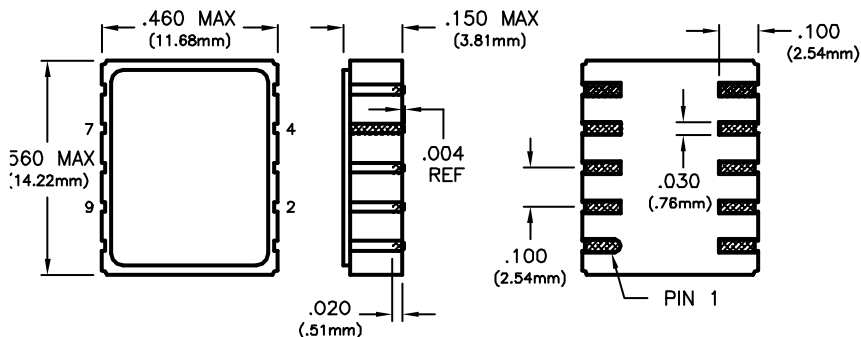
ASM51AA - 51.84MHz

CLOCK  
SERIES

CENTER  
FREQUENCY

Specifications subject to change without notice.

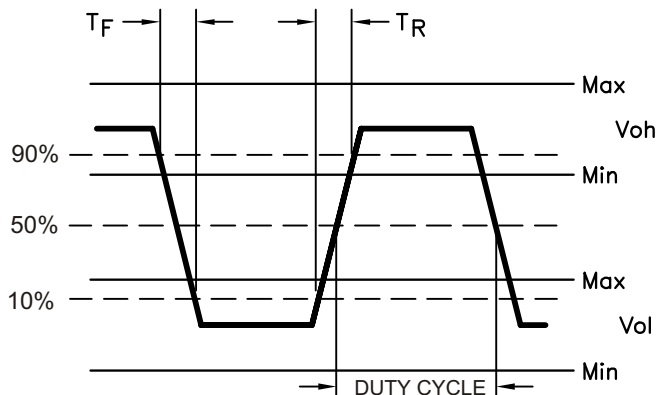
CRYSTAL CONTROLLED OSCILLATORS



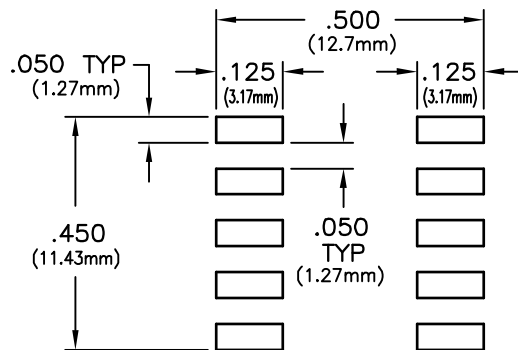
PIN	CONNECTION
1	N/C
2	N/C
3	N/C
4	GROUND
5	N/C
6	N/C
7	OUTPUT
8	N/C
9	Vcc
10	N/C

Dimensional Tolerance:  $\pm .02"$   
 $\pm .005"$

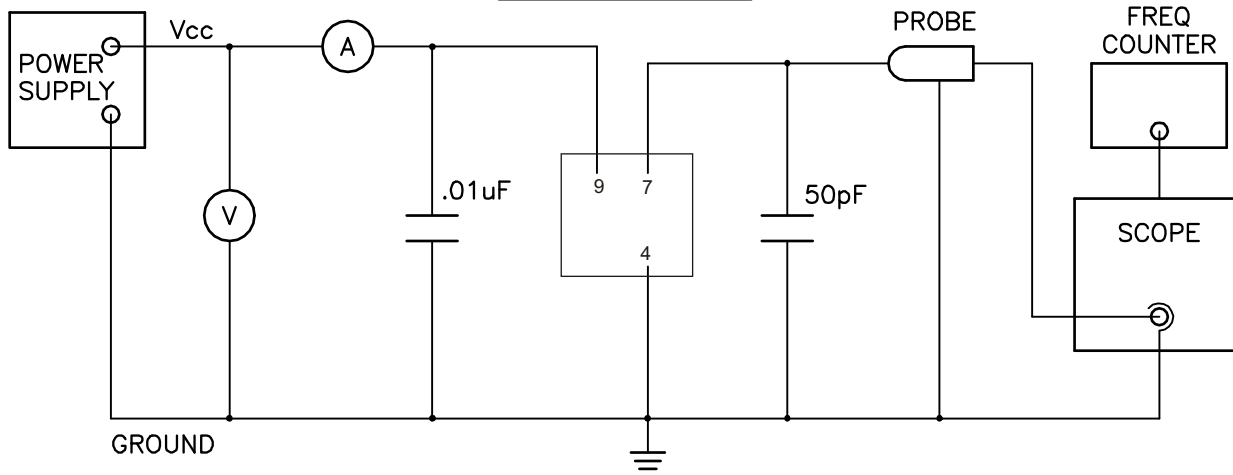
OUTPUT WAVEFORM



SUGGESTED PAD LAYOUT



TEST CIRCUIT



Specifications subject to change without notice.