

5.0V HCMOS/TTL COMPATIBLE 14 PIN DIP CRYSTAL CLOCK OSCILLATOR

ABSOLUTE MAXIMUM RATINGS

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

TABLE 1.0

MODEL SPECIFICATIONS:

MODEL S13R8

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	1.0	-	80	MHz	
Frequency Tolerance:		-25	-	25	ppm	1
Operating Temperature Range		0	-	70	°C	

TABLE 2.0

MODEL S14R8

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	1.0	-	80	MHz	
Frequency Tolerance:		-50	-	50	ppm	1
Operating Temperature Range		0	-	70	°C	

MODEL S15R8

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	1.0	-	80	MHz	
Frequency Tolerance:		-100	-	100	ppm	1
Operating Temperature Range		0	-	70	°C	

MODEL S16R8

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	1.0	-	80	MHz	
Frequency Tolerance:		-100	-	100	ppm	1
Operating Temperature Range		-40	-	85	°C	

OPERATING SPECIFICATIONS

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Supply Voltage	(Vdd)	4.5	5.0	5.5	Vdc	
Supply Current	1.0 to 24.999 MHz	(Icc)	-	25	mA	
	25 to 49.999 MHz	(Icc)	-	45	mA	
	50 to 80.000 MHz	(Icc)	-	60	mA	

TABLE 3.0

TTL OUTPUT CHARACTERISTICS

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	10	TTL Loads	
Voltage	(High)	(Voh)	2.4	-	Vdc	
	(Low)	(Vol)	-	0.5	Vdc	
Current	(High)	(Ioh)	-16	-	mA	
	(Low)	(Ioh)	-	16	mA	
Duty Cycle measured at 50% of Vcc		45	50	55	%	
Rise / Fall Time measured at 10% to 90%		-	4	5	nS	
Start-Up Time		-	3	10	mS	
Jitter (BW=10kHz to 20MHz)		-	-	5	ps rms	
Jitter (BW=12kHz to 20MHz)		-	-	1	ps rms	

TABLE 4.0

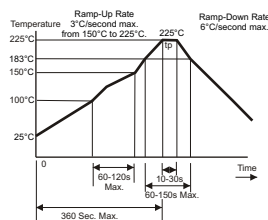
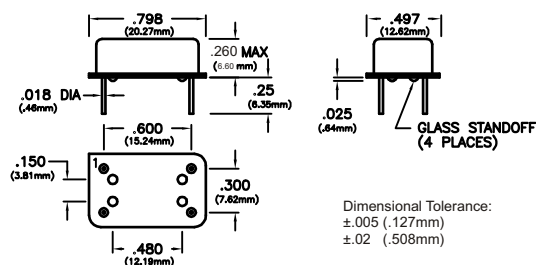
PACKAGE CHARACTERISTICS

Package	Hermetically sealed metal package
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TABLE 5.0

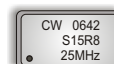
Note:

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



Pad	Connection
1	N/C
7	Ground
8	Output
14	Vcc

TABLE 6.0



S13R8, S14R8,
S15R8, S16R8

DESCRIPTION

Connor Winfield model S1xR8 - Series are a 5.0V HCMOS/TTL Compatible, Fixed Frequency Crystal Oscillator (XO). The S1xR8 - Series are designed for use in all applications requiring a precision clock.

FEATURES

1.0 TO 80 MHZ
5.0V OPERATION
OVERALL FREQUENCY
TOLERANCE:
+/-25PPM
+/-50PPM
+/-100PPM
TEMPERATURE RANGE:
0 TO 70°C
-40 TO 85°C
DRIVES 10 TTL LOADS
LOW JITTER: <1PS
HERMETICALLY SEALED
PACKAGE
RoHS 5/6 COMPLIANT

ORDERING INFORMATION

S15R8 - 25.0MHz

CLOCK
SERIES

CENTER
FREQUENCY

Specifications subject to change without notice.