Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 TEL: 281-870-8822EMAIL:Sales@DynamicEngineers.com

C7 LC2020S-10MHz-A-V

Oven Controlled Crystal Oscillator

Features and Benefits

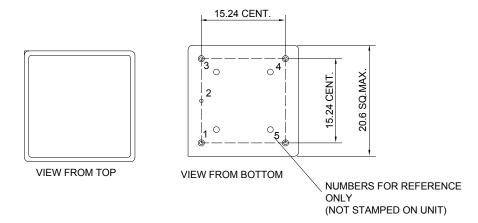
Dimension 20.6x20.6x11.0mm typical SC cut crystal

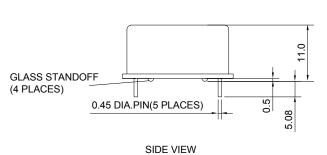
Typical Applications

SDH/SONET, Telecommunication base station Test and measurement equipment Synthesizer, Digital switch, Reference Timing Circuit SATCOM ground station reference

Mechanical Drawing & Pin Connections

Drawing No: MD160045-1





PIN CONNECTION 1

Pin	Signal
1	CONTROL VOLTAGE
2	REFERENCE VOLTAGE
3	GND
4	R.F. OUTPUT
5	vcc

Unit: mm

1mm=0.039inch



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Specifications

OCXO Specification	Sym	Condition	Min.	Value Typ.	Max.	Unit	Note
Frequency Range	F ₀		IVIIII.	10.000000	WIGA.	MHz	
RF Output	. 0			10.000000		111112	
Output Waveform	T	1		Rectangular		1	
Level				HCMOS			
Output Level"1"			+3.5			V	
Output Level"0"					+0.5	V	
Load				15		pF	
Duty Cycle		@+2.0V	45	50	55	%	
Spurious					-60	dBc	
Power Supply							
Voltage	Vcc		4.75	5.0	5.25	V	
Current		Warm-up			500	mA	
Current		Steady State			1.0	W	@+25°C
Reference Voltage							
Reference Voltage			3.8	4.0	4.2	V	
Load] [9			Kohm	
Frequency Control							
Tuning Dance		VCO @ 0V			-0.4	ppm	Ref. to frequency
Tuning Range		VCO @ 4V	+0.4			ppm	at nominal center voltage
Control Voltage	Vc		0	2.0	4.0	V	Ŭ
Slope				Positive			
Input Impedance			100			Kohm	
Frequency Stability							
Vs. Operating Temperature Range		-40℃ to +85℃			+/-50	ppb	
Vs. Supply Voltage Change		+/-5% change			+/-0.5	ppb	
Warm-up		In 3 minutes @+25°C ref. to 1hour			+/-50	ppb	
Per Day		After 30 Days			+/-0.5	dqq	
Aging Per Year		7 33 24/5			+/-50	ppb	
10 Years					+/-0.3	ppm	
Phase Noise						1 1 1	
		@10Hz			-115	dBc/Hz	
		@100Hz			-135	dBc/Hz	
Phase Noise		@1KHz			-145	dBc/Hz	
		@10KHz			-150	dBc/Hz	
Environmental							<u>'</u>
Operating Temperature Range	-40℃ to -	+85℃					