

TCXO DIP14

Features:

- Low Power Consumption
- High Stability
- Mass production with good uniformity
- ISO9001:2008 & ISO 14001:2004 certificated
- ROHS compliant
- Custom build capability



Specification:

Parameter	Min	Typ.	Max	Unit	Condition	Note
Frequency Stability						
Frequency	5.0		100.0	MHz		
Initial Frequency Accuracy	-0.5ppm /-1ppm		+0.5ppm /+1pp	ppm	Vc=1.65V/ @25°C, after 15mins power on ref to nominal frequency.	
Supply Variation	-0.2		+0.2	ppm	Vcc±5%, @25°C	
Load Variation	-0.2		+0.2	ppm	CL±5%, @25°C	
Aging	per day	-1	+1	ppm	Aging after 30 days of operation	For 10.000MHz operational frequency
	10 years	-5	+5	ppm		
Temperature Stability	-0.28/-1		+0.28/+1	ppm	-40°C ~ +85°C @ 25°C	
Supply Voltage/Current						
Voltage Supply	3.135	3.3	3.465	V		
	4.75	5	5.25			
Operating Current			10	mA		
			30	mA		
Output Characteristics						
CMOS	Load		15	30	pF	
	Output Level(VOL)			10%Vcc	V	
	Output Level(VOH)	90%Vcc			V	
	Duty Cycle	45		55	%	
	Rise Time/ Fall Time			5	ns	
Sine-Wave	Load		50		Ω	
	Level	5	7	9	dBm	
	Harmonics Level		30		dBc	

* Above specification subject to change without prior notice, please consult our sales @ www.crystal-bj.com



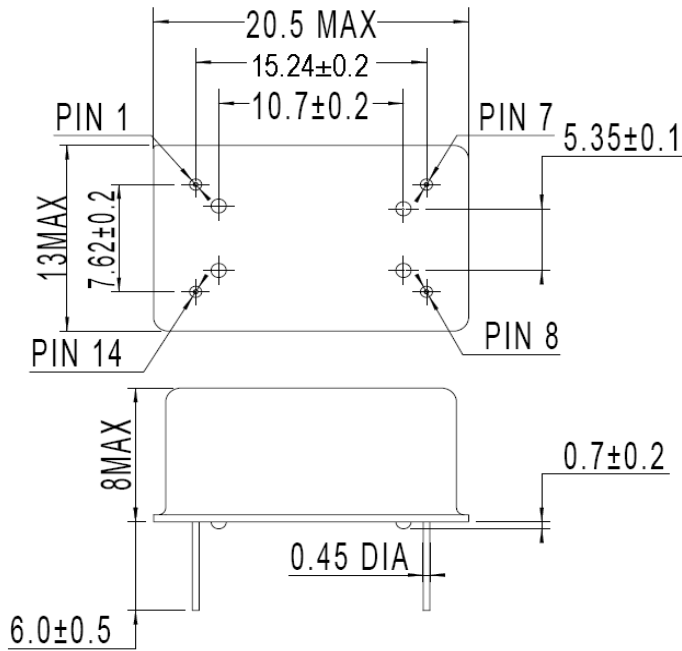
Spurious		70			dBc		
Phase Noise							
Phase Noise		-85		dBc/H z	@10Hz	For 10.000MHz operational frequency	
		-110			@100Hz		
		-130			@1kHz		
		-145			@10KHz		
		-145			@100KHz		
		-148			@1MHz		
Voltage Control Characteristics							
Control Voltage Range	0	1.65	3.3	V			
	0	2.5	5				
Frequency tuning range	-9		-15	ppm	Vc=0V	For 10.000MHz operational frequency	
	-1		+1	ppm	Vc=1.65V		
	+9		+15	ppm	Vc=3.3V		
Slope	Positive						
Linearity	-10		+10	%			
Input Impedance	100			KΩ			
Mechanical specification & Package							
Package Size	Refer to the below drawing						
Pin Connector Size							
Pin Connector Definition							
ROHS	RoHS compliant (network exempted)						

Environmental, Mechanical Conditions	
Operating temp range	-40℃~+85℃
Operable temp range	-40℃~+85℃
Storage temp range	-50℃~+105℃
Drop Test	The test shall be carried out as the provisions of the IEC60028-2-32 test Ed. 10cm height, 3 times on hard board with thickness of 3cm
Bumping Test	Device are bumped to three mutually perpendicular axes at peak acceleration of 400m/s ² , each 4000±10 times , 6ms pulse duration time.
Vibration test	Frequency range: 1Hz-4Hz-100Hz-200Hz Acceleration: 0.0001g ² /Hz-0.01g ² /Hz-0.01g ² /Hz-0.001g ² /Hz Grms=1.15g Sweep time: 30 minutes (perpendicular axes each sweep time)
Mechanical Shock	100g, 6mS duration, 1/2 sine wave, 3 shocks each direction along 3 mutually perpendicular planes.
Thermal shock	0.5h@-40℃ , 0.5h@+85℃ , Note: the changing time < 30 seconds, cycling for 100 times

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Dimensions:

Unit: mm



Pin Function

Pin No.	Pin Function
1	VC
7	GROUND
8	OUTPUT
14	VCC

Code	Specification
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How to Order

<u>T4</u>	<u>Output</u>	<u>Supply Voltage</u>	<u>Temp.Range</u>	<u>Temp.Stability</u>	<u>Frequency</u>																														
↓	↓	↓	↓	↓	↓																														
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Code	Specification
L	LVC MOS
H	HCMOS
C	Clipped Sine
S	Sine Wave

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