

Dynamic Engineers Inc.

2550 Gray Falls Dr., Suite#128, Houston, TX, 77077 USA TEL: 1-281-870-8822 EMAIL: Sales@DynamicEng.com

Features and Benefits

Frequency range: 60MHz Supply voltage: 5.0V Steady current: 45mA Max Output waveform: HCMOS Frequency stability vs. operating temperature: ±1.0ppm Aging: ±1.0ppm per year Phase noise@1KHz: -135dBc/Hz Operating temperature: -40°C to +70°C Size: 14.6x9.4x6.0mm

Typical Applications

Synthesizer Base Station Instrumentations SDH/SONET

Description

TCXO914CE-LN-60MHz-241122 offers wide temperature operation from -40°C to +70°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

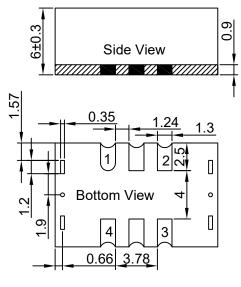
14.65±0.3

Drawing No: MD230039-1

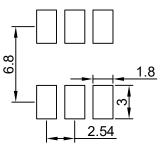
Pin Connections

ſ	#1	Control Voltage			
	#2	GND			
	#3	Output			
	#4	Vcc			

Unit in mm 1mm = 0.0394 inches



Recommended Land Pattern



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Rev. 1

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Dynamic Engineers reserves the right to make changes to the company datasheet(s) along with other information contained inside; such as data tables and araphs without notification to potential customers who may have earlier revisions in their possession.



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Specifications

Oscillator	C. m	Condition	Value			Unit	Nata
Specification	Sym	Condition	Min.	Тур.	Max.	Unit	Note
Operational Frequency	Fnom			60		MHz	
Output				HCMOS			
Output High Level	V _{OH}		2.4			V	
Output Low Level	Vol				0.4	V	
Duty Cycle		(V _{OH} -V _{OL})/2	45		55	%	
Rise/Fall Time		· · ·			6	ns	
Output load					15	pF	
Power Supply							
Voltage	V _{cc}	±5%		5.0		V	
Current with output					45	mA	
Frequency Adjustment Range			<u> </u>				
Electronic Frequency Control (EFC)			±5.0			ppm	
EFC voltage	Vc		0.5	1.5	2.5	V	
Tuning Slope	Ū		•	Positive			
Linearity					10	%	
Frequency Stability							
Vs temperature		-40°C to +70°C			±1.0	ppm	
Vs supply voltage changes		±5%			±0.1	ppm	
Vs load changes		±5%			±0.2	ppm	
Initial Tolerance		At shipment, nominal EFC @25°C			±1.0	ppm	
First Year Aging					±1.0	ppm	
Phase noise		1KHz		-135		dBc/Hz	@25°C
Environmental Conditions			·				
Operating temperature range	-40°C to +70°C						
Temperature Stress Test	IEC60068, GJB360B						
Mechanical Stress Test	IEC60068, GJB360B						
EMC Test (ESD)	IEC610	00, JESD22					
Solder Ability	EIA/JESD22-B102-C						
Contact Pads	Gold over Nickel						
RoHS	RHOS	Directive 2011/65/EU Annex II Re	ecasting 200)2/95/EC			