



### 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

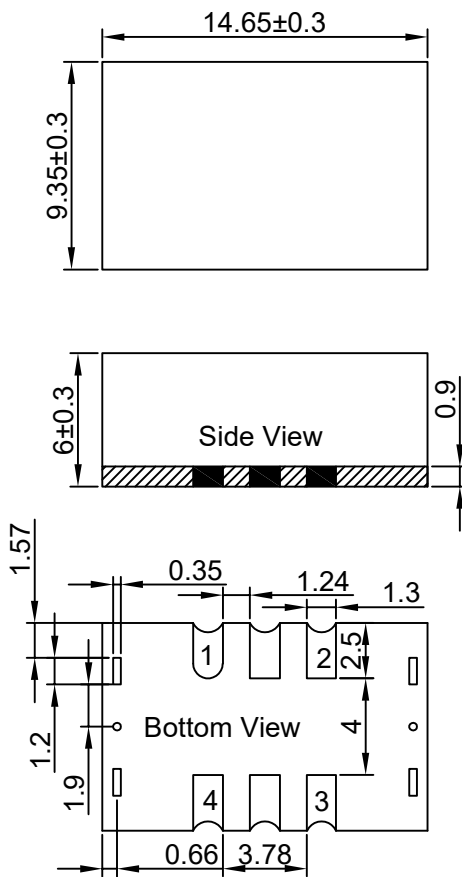
Synthesizer  
Base Station  
Instrumentations  
SDH/SONET

### 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

Drawing No: MD230039-1

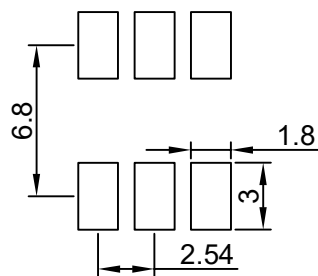


#### Pin Connections

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

Unit in mm  
1mm = 0.0394 inches

#### Recommended Land Pattern





## Specifications

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency	F <sub>nom</sub>			60		MHz	
Output			HCMOS				
Output High Level	V <sub>OH</sub>		2.4			V	
Output Low Level	V <sub>OL</sub>				0.4	V	
Duty Cycle		(V <sub>OH</sub> -V <sub>OL</sub> )/2	45		55	%	
Rise/Fall Time					6	ns	
Output load					15	pF	
<b>Power Supply</b>							
Voltage	V <sub>cc</sub>	±5%		5.0		V	
Current with output					45	mA	
<b>Frequency Adjustment Range</b>							
Electronic Frequency Control (EFC)			±5.0			ppm	
EFC voltage	V <sub>c</sub>		0.5	1.5	2.5	V	
Tuning Slope			Positive				
Linearity					10	%	
<b>Frequency Stability</b>							
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
<b>Environmental Conditions</b>							
Operating temperature range	-40°C to +70°C						
Temperature Stress Test	IEC60068, GJB360B						
Mechanical Stress Test	IEC60068, GJB360B						
EMC Test (ESD)	IEC61000, JESD22						
Solder Ability	EIA/JESD22-B102-C						
Contact Pads	Gold over Nickel						
RoHS	RHOS Directive 2011/65/EU Annex II Recasting 2002/95/EC						