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

TCXO914AW-100MHz-A
High precision, low noise floor 100MHz TCXO

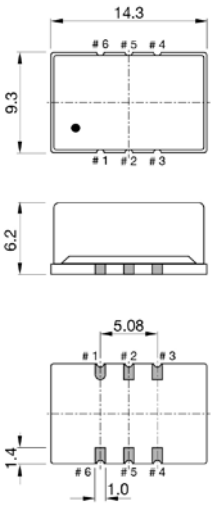
Features and Benefits
High frequency stability (up to ±0.5ppm over -40°C to +85°C)
LVPECL Output
SMD Miniature package

Typical Applications
UHF Synthesizers
SATCOM System
Portable Microwave Applications

Description
TCXO914AW-100MHz-A offers wide temperature operation from -40°C to +85°C with outstanding frequency stability and low phase noise performance.

Mechanical Drawing & Pin Connections

Drawing No: **MD190026-1**



Pin function

# 1	Open or ED
# 2	NC or GND
# 3	GND
# 4	Output
# 5	C- Output
# 6	V_{DD}

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Specifications

Oscillator Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency		F_{nom}			100		MHz	
Sub-harmonics					-75	-65	dBc	
LVPECL	Output Level			2.70 V ⩾V_{OH} ⩾ 2.27 V; 1.70 V ⩾V_{OL} ⩾ 1.45 V			V	
	Output Load			50 Ω into V_{DD} – 2 V			ohm	
Power Supply								
Voltage		V_{DD}			3.3		V	
Current Consumption						50	mA	
Frequency Control*								
Control voltage range		V_c		0.5	1.5	2.5	V	
Tuning range				±5		±10	ppm	Tuning Slope Positive
EFC input impedance				100			kohm	
Frequency Stability								
Versus temperature			-40°C to 85°C, ref to (fmax+fmin)/2		±1		ppm	
Tolerance at 25°C				0		+1.0	ppm	
Versus ±5% change in supply voltage			Ref to frequency at nominal supply			±0.05	ppm	
Versus ±10% change in load			Ref to frequency at nominal load			±0.05	ppm	
First Year Aging			40°C			+1.0	ppm	
RMS phase jitter			12KHz-20MHz		15		fs	
Phase noise			10Hz		-78			
			100 Hz		-105		dBc/Hz	
			1000 Hz		-127			
			10 KHz		-150			
			100 KHz		-170			
Short-Term Stability		ADEV	Tau = 1 second			1.0	E-10	
Environmental Conditions								
Operating temperature range		-40°C to 85°C						
Storage temperature range		-55°C to 105°C						
Reflow profiles as per IPC/JEDEC J-STD-020C		<=245°C over 10s max						