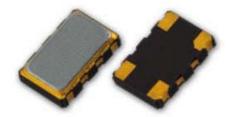
#### **Features**

Frequency 10.245 MHz 5mm x 3.2mm x 1.15mm ceramic SMD Compact and lightweight Low power consumption Low cost | excellent stability

## **Topical Applications**

WLAN | WiMAX Automatic Meter Reading

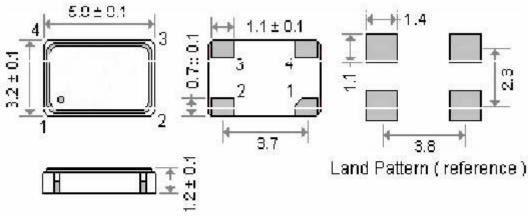
#### **Picture of Part**



#### **Description**

The TCXO3306 family offers low noise compensation techniques combined with high volume manufacturing processes resulting in low cost, tightly distributed performance parameters, and very good overall long term frequency stability and reliability.

## **Physical Dimensions & Pin Connections**



#### Pad Connections:

Pad 1: Voltage control for VCTCXO; Ground for TCXO.

Pad 2 : Ground ; Pad 3 : Output , Pad 4 : Supply Voltage

Pin	Function						
1	VCON : VCTCXO GND : TCXO						
2	GND						
3	OUTPUT						
4	Vdd						

## **Specification**

TCXO		Sym.	Condition		Value		Unit	Note	
Specification				Min.	Tvp.	Max.			
Operational Frequency Range		$f_0$			10.245000		MHz		
		1							
	Load						pF		
	H - level voltage	$V_{H}$		0.9*Vcc			V		
	L - level voltage	$V_{L}$				0.1*Vcc	V		
	Rise & Fall time						ns		
	Duty cycle						%		
Clipped Sine-wave ONLY	Level	L		0.8			pk-pk		
	Load Resistance	RL			10		Kohm		
	Load Capacitance	CL			10		pF		
	Control Voltage	Standard: +1.5 V±1.0 V for all input voltages							
Pin 1 Options . for VCTCXO only	Frequency Deviation Range	±6.0 ppm (min.), V <sub>control</sub> = +1.5 V±1.0 V							
	Slope Polarity	Positive slope. Positive voltage for positive frequency shift.							
	(Transfer Function) Input Impedance	Positive slope. Positive voltage for positive frequency snift.  1.0 M $\Omega$ min.							
	Modulation Modulation								
	Bandwidth	3 KHz min. Measured at -3 dB, $V_{control}$ =+1.5 $V_{DC}$							
	Linearity	10% max.							
Power suppl	y								
Voltage		Vcc		2.850	3.000	3.150	V		
Current cons	Current consumption					1.5	mA		
				<u> </u>	l.				
Frequency st	tability								
vs. temperature			-40°C to +85°C, ref 25°C	-2.0		+2.0	ppm		
vs. 5% change in supply voltage			ref Vcc typ.	-0.300		+0.300	ppm		
Tolerance at 25C				-2.0		+2.0	ppm	Frequency 1 hr after reflow	
			10 Hz						
SSB Phase noise @13MHz clipped sine wave			100 Hz	1	-115				
			1 kHz		-135		dBc/Hz		
		10 kHz		-148					
			100 kHz					4	
Aging	Per Year		Projected yearly aging after 30 days operation	-1.0		+1.0	ppm	-	
Environmon	tal, mechanical cond	litions	l salanda	1				L	
		uuuns.	-40°C to +85°C maximum rang	e availahla	hat is stand	dard			
Operating temperature range Storage temperature range			C to -os C maximum rang	L AVAIIADIE	nat 15 Stall	uai u			
Mechanical shock									
Vibration									
Soldering									

## TCXO3306-10.245MHz

Miniature High Stability TCXO

# **Ordering information**

TCXO3306-10.245000MHz