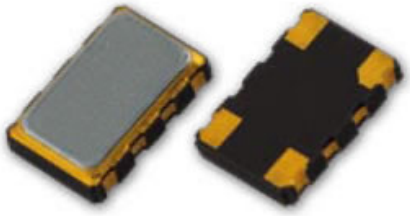
TCXO3437
Miniature High Stability TCXO

Features

Frequency Range 10 to 40 MHz
5mm x 3.2mm x 1.15mm ceramic SMD
Compact and lightweight
Low power consumption
Low cost / excellent stability

Picture of Part



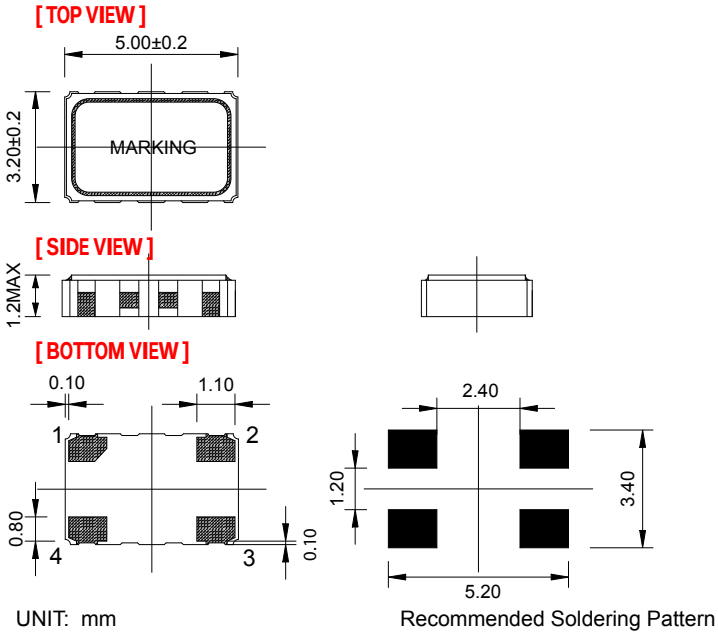
Typical Applications

WLAN / WiMAX
Automatic Meter Reading

Description

The TCXO3437 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



UNIT: mm

Recommended Soldering Pattern

Pin Connections

Pin	Function
1	VCON : VCTCXO GND : TCXO
2	GND
3	OUTPUT
4	V_{DD}

Specification

TCXO Specification		Sym.	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		f_0			16.8		MHz	
	Load						pF	
	H - level voltage	V_H					V	
	L - level voltage	V_L					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	
Power supply								
Voltage		Vcc		2.85	3.0	3.15	V	
Current consumption		Icc				2.5	mA	
Frequency control*								
Control voltage range		Vc		0.5	1.5	2.5	V	Positive tuning slope
Tuning range				+/- 5			ppm	
Vc Input Impedance				1			Mohm	
Frequency stability								
vs. temperature			-40°C to +85°C, ref 25°C	-1.6		+1.6	ppm	0.5 ppm available case by case
vs. 5% change in supply voltage			ref Vcc typ.	-0.200		+0.200	ppm	
Tolerance at 25C				-0.5		+0.5	ppm	Frequency 1 hr after reflow
SSB Phase noise			10 Hz		-85		dBc/Hz	
			100 Hz		-110			
			1 kHz		-130			
			10 kHz		-140			
			100 kHz		-145			
Aging	Per Year		Projected yearly aging after 30 days operation	-1.0		+1.0	ppm	
Environmental, mechanical conditions.								
Operating temperature range			-40°C to +85°C maximum range available that is standard					
Storage temperature range			-55°C to +85°C					
Thermal shock			-55°C to +125°C, each temperature 10 mins, 200 cycles. MIL-STD-883D 1011.9, condition B					
Mechanical shock			1500g, half-sine, 0.5 ms, 3 directions 3 times. MIL-STD-883D 2002.3, condition B					
Vibration			20~2000 Hz, 1.5 mm, 20 g X, Y, Z each direction 4 hrs, sinuate. MIL-STD-883D 2005.2, condition B					
Soldering								