TCXO5300THP-16.368MHz
High Precision Very Low Noise SMD VCTCXO

Features

Frequency 16.368000 MHz
5 mm x 3.2 mm x 1.65 mm ceramic SMD
+/- 2.5 ppm total aging over 20 years
Clipped sine wave
+/- 0.5 ppm from -30C to 70C

Picture of Part

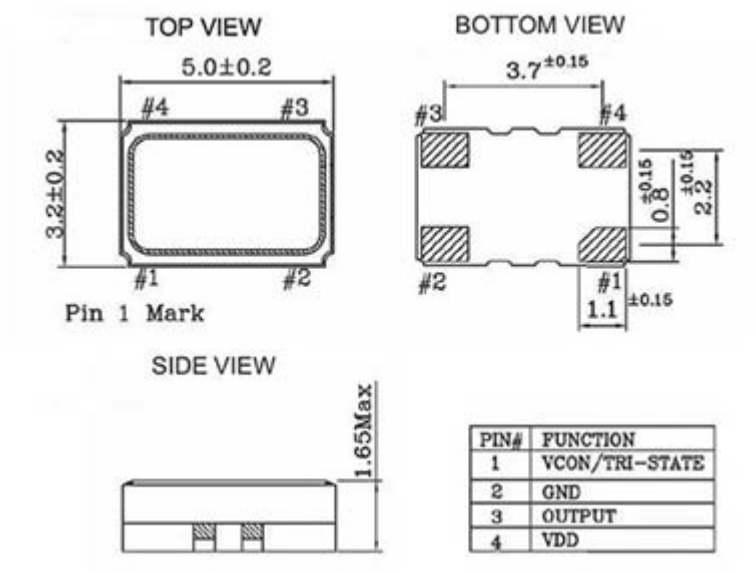
Typical Applications

Femtocells, GPS Receivers
Mobile Radio
System Clocks for wide range of applications

Description

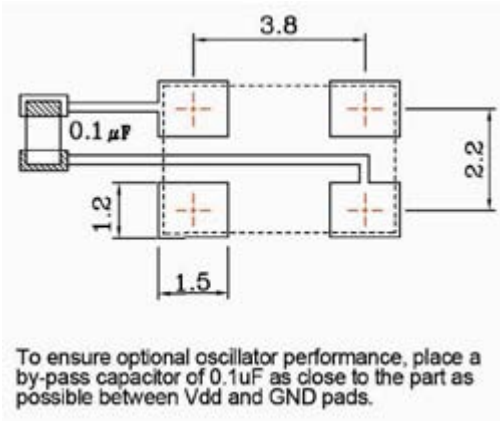
The TCXO5300THP family offers low noise compensation techniques combined with aggressive conditioning processes resulting in outstanding long term frequency stability, tightly distributed performance parameters, and superior long term reliability.

Mechanical Drawing and PIN Connections



PIN#	FUNCTION
1	VCON/TRI-STATE
2	GND
3	OUTPUT
4	VDD

Solder Pad Layout (mm)



Specification

TCXO Specification		Sym.	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Frequency Range		f_0			16.368000		MHz	
Clipped Sine-wave	Level	L		0.8			pk-pk	
	Load Resistance	RL			10		Kohm	
	Load Capacitance	CL			10		pF	
Power supply								
Voltage		Vcc		3.135	3.300	3.465	V	
Current consumption		Icc				3.5	mA	clipped sine wave
Frequency control*								
Control voltage range		Vc		0.5	1.5	2.5	V	Positive tuning slope
Tuning range				+/- 5.0			ppm	
Vc Input Impedance				100			Kohm	
Frequency stability								
vs. temperature			-30°C to +70°C, ref 25°C	-0.500		+0.500	ppm	
vs. 5% change in supply voltage			ref Vcc typ.	-0.100		+0.100	ppm	
Tolerance at 25C				-2.000		+2.000	ppm	Frequency 1 hr after reflow
SSB Phase noise @16.368 MHz clipped sine			100 Hz		-125	-122	dBc/Hz	
			1000 Hz		-145	-142		
			10 kHz		-150	-152		
Total Aging	Over 20 years		Projected after 30 days operation	-2.500		+2.500	ppm	
Environmental, mechanical conditions.								
Operating temperature range			**-30°C to +70°C**					
Storage temperature range			**-55°C to +125°C**					
Mechanical shock			1500G ; half sine ; 0.5 ms ; each AXIS for three times					
Vibration			10 to 2000 Hz ; 1.52mm ; 20G ; each axis for 4 hrs					

Ordering inlormation

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