

### Features and Benefits

16.32 MHz  
 Low noise Clipped sine sine output  
 Temp. stability less than +/- 0.5 ppm  
 -40C to +85C operation  
 +3.3V supply ; Voltage-controlled

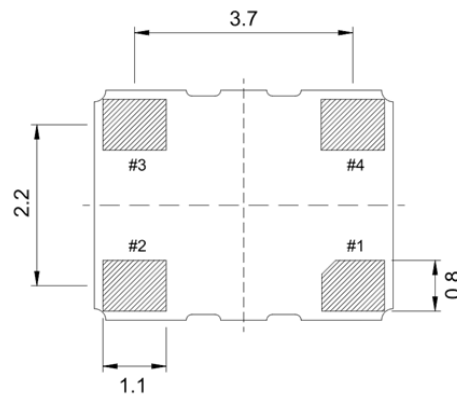
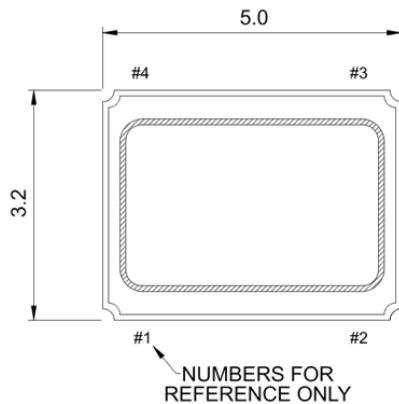
### Typical Applications

Beidou Navigation Reference Oscillator  
 SATCOM SYSTEMS ( ON THE MOVE ; MOBILE )  
 Mobile Radio

### Description

The T5300TMP TCXO design technology offers a new generation IC compensation with better phase noise and lower ultimate stability over operating temperature.

### Mechanical Drawing & Pin Connections



PIN NO.	CONNECTIONS
1	Control Voltage
2	Ground
3	Output
4	Supply Voltage

## Specification

Oscillator Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
Operational Frequency Range	F <sub>nom</sub>			16.320		MHz	
Clipped Sine	Output Level		+0.800		+2.000	Vpk-pk	
	Output Load	10K ohm in parallel with		10		pF	
	Start Time				2	ms	Milli-seconds
<b>Power Supply</b>							
Voltage			3.15	3.30	3.45	V	
		Supply Current under load			3.5	mA	
<b>Frequency Control* ( Electronic + Mechanical )</b>							
Control voltage Input Impedance			100K			ohm	
Frequency Tuning Range			+/- 5.0			ppm	
Control Voltage range ( Pad # 1 )			0.5	1.5	2.5	V	
<b>Frequency Stability</b>							
Versus temperature		@1.5V on Pad 1	-500.0		+500.0	ppb	
Tolerance at 25°C			-2000.0		+2000.0	ppb	After two reflows
Versus 5% change in supply voltage			-200.0		+200.0	ppb	
Versus 10% change in load			-200.0		+200.0	ppb	
Aging per year		After 30 days operation	-1000.0		+1000.0	ppb	
SSB Phase noise (worst case) @16.32 MHz		10 Hz			-85.0	dBc/Hz	
		100 Hz			-115.0		
		1000 Hz			-135.0		
		10 KHz			-150.0		
		100 KHz			-152.0		
<b>Environmental Conditions</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +125°C						
Mechanical Shock	MIL-STD-883 2002 Cond. B ; 1500G ; half-sine, 0.5ms, each axis three times						
Vibration Test	MIL-STD-883 2007 Cond. A ; 10-2000 Hz, 1.52 mm , 20G, each axis for 4 hrs						
Thermal Shock	MIL-STD-883 2002 Cond. B ; -55°C to +125°C ; soak time 10 minutes at each temp. ; 200 total hot-cold cycles						