

**Features**

Frequency 10.000000 MHz  
 HCMOS square wave  
 +/- 100ppb from -40°C to +85°C  
 AT-strip Resonator Technology  
 150 mA Max @ -40°C  
 Less than 300 second warm-up with 300 mA current

**Typical Applications**

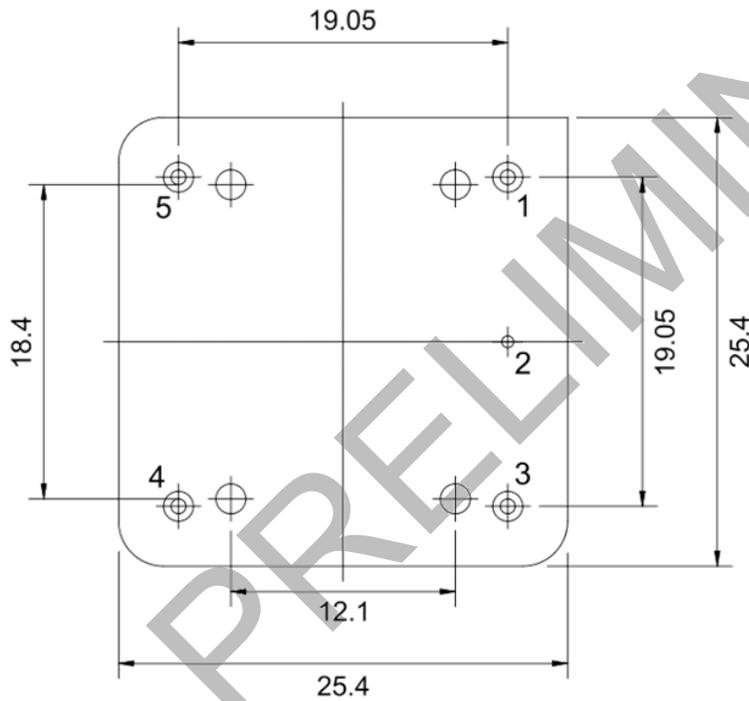
Digital Switching Systems  
 Battery Operated Systems  
 Radio Transceiver

**Description**

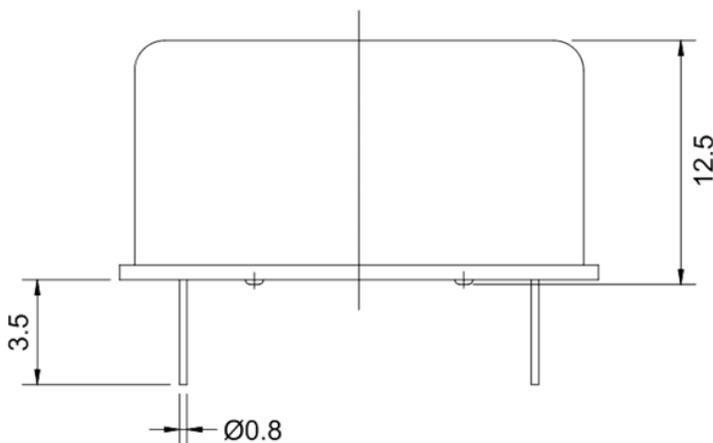
The OCXO2525N family offers a specially designed AT-cut strip resonator technology using an evacuated oven control structure to reduce power consumption and offer a stable precision frequency output.

**Physical Dimensions**

**Signal Pin Assignment**



PIN	CONNECTION
1	RF OUTPUT
2	GROUND $V_{SS}$
3	NC
4	NC
5	SUPPLY VOLTAGE $V_{DD}$



Unit = mm

**Specification**

OCXO Specification	Sym	Condition	Value			Unit	Note
			Min.	Typ.	Max.		
<b>Operational Frequency Range</b>	<b>F<sub>0</sub></b>			<b>10.000</b>		<b>MHz</b>	
HCMOS	Logic 1 Level	Load = 15 pF typical	4.5			Vdc	
	Logic 0 Level				0.4	Vdc	
	Load			15		pF	
	Rise / Fall Time				5	Ns	
	Duty Cycle			45		55	%
<b>Power Supply</b>							
Voltage	Vcc		11.4	12.0	12.6	V	
Current Consumption		Warm-up			300	mA	
		Steady-state at 25°C			150	mA	
<b>Warm-up Time : To within +/- 10 ppb after 5 minutes referenced to frequency after 30 minutes from turn-on</b>							
<b>Frequency Control*</b>							
Frequency Adjust Range						ppm	Tuning Slope Positive
Control Voltage on Pin 3						V	
Input Resistance						ohms	
<b>Frequency Stability</b>							
Vs. temperature		-40°C to +85°C, ref 25°C	-100.0		+100.0	ppb	
Frequency Tolerance		After 1 min @ +25 ± 5°C	-200.0		+200.0	ppb	
SSB Phase noise @10 MHz		1 Hz		-90		dBc/Hz	
		10 Hz		-120			
		100 Hz		-140			
		1000 Hz		-145			
		10 KHz		-150			
		100 KHz		-155			
Total Aging	Per Day	Projected after 30 days operation	-0.5		+0.5	ppb	
	First Year		-100.0		+100.0	ppb	
	10 Years		-400.0		+400.0	ppb	
Short term stability		After 1 hr	-0.05		+0.05	ppb/s	
Frequency Retrace			-10		+10	ppb	UUt is turned on 24hrs, turn off for 24hr, turn on and read Frequency after 30min to compare the freqncy prior to turn off
<b>Environmental</b>							
Operating temperature range	-40°C to +85°C						
Storage temperature range	-55°C to +105°C						
Hand Soldering Conditions	3s MAX AT +350°C						