Features

Frequency 100.000000 MHz
400 mV rms RF output
+/- 300 ppb from -40°C to +70°C
25.8 x 25.8 x 10.0 mm leaded package
-127 dBc/Hz @ 100 Hz max.
12.0 V supply

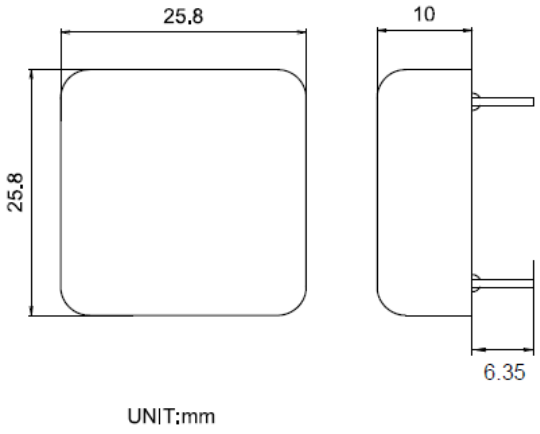
Typical Applications

Microwave Communication
Ref. for Microwave Signal Source
Test Equipment Reference
Telecommunication Systems

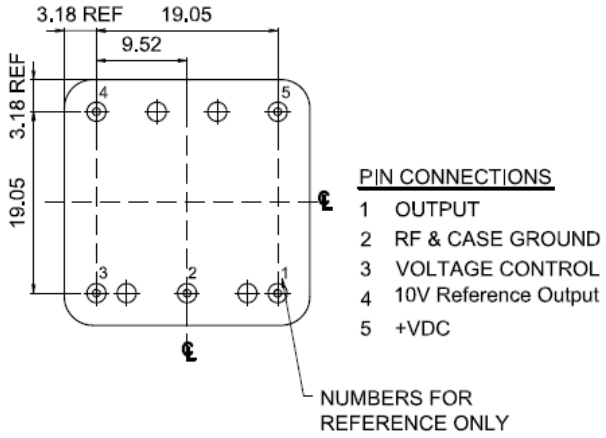
Description

The OCXO2525M family offers a custom designed SC-cut crystal with very high Q that is specially matched to the oscillator and amplifier circuits to deliver consistent world class phase noise on all production shipments.

Physical Dimensions



Signal Pin Assignment



Specification

OCXO Specification		Sym	Condition	Value			Unit	Note
				Min.	Typ.	Max.		
Operational Center Frequency		F_0			100.000000		MHz	
Sine wave	Output Level			400			mVrms	
	Harmonics					-25.0	dBc	
	Output Load			45	50	55	ohms	
Power Supply								
Voltage		Vcc		10.8	12.0	13.2	V	
Turn-on Current			Warm-up			370	mA	
Steady-state Current			After 60 seconds ON			115	mA	
Warm-up Time : To within +/- 200 ppb after 60 seconds referenced to frequency after 30 minutes from turn-on								
Frequency Control Input Voltage (Pin 4)								
Frequency Adjustment Range				+/- 3.000			ppm	Tuning Slope Positive
Control Voltage Range (Pin 3)				0.00		10.00	V	
Reference Voltage Output (Pin 4)					10		V	
Frequency Stability								
Vs. temperature			-40°C to +70°C, ref 25°C	-300.00		+300.00	ppb	
Vs. 10% change in supply voltage			ref. Vcc typ.	-100.00		+100.00	ppb	
Tolerance at 25C and 5.00 V on Pin 3				-200.00		+200.00	ppb	
SSB Phase noise @ 100 MHz							dBc/Hz	
			10 Hz			-97		
			100 Hz			-127		
			1000 Hz			-152		
			10 KHz			-167		
			100 KHz			-167		
Total Aging			Projected after 30 days operation					
	First Year					+/- 0.3	ppm	
Environmental								
Operating temperature range		-40°C to +70°C						
Storage temperature range		-55°C to +80°C						
Humidity		Hermetically Sealed						
Vibration		10 to 500 Hz ; 5G in all three directions						
Soldering Conditions		260°C for 10 seconds, Hand solder ONLY						