



Approved by:
Checked by:
Issued by:

SPECIFICATION

P/N: SJKOCF12016JK-10MGJM

深圳市晶科鑫实业有限公司
SHENZHEN CRYSTAL TECHNOLOGY INDUSTRIAL CO., LTD.

Tel: 86-755-88352809
E-mail: sjksale@126.com

Fax: 86-755-88353718
URL: [Http://www.q-crystal.com](http://www.q-crystal.com)

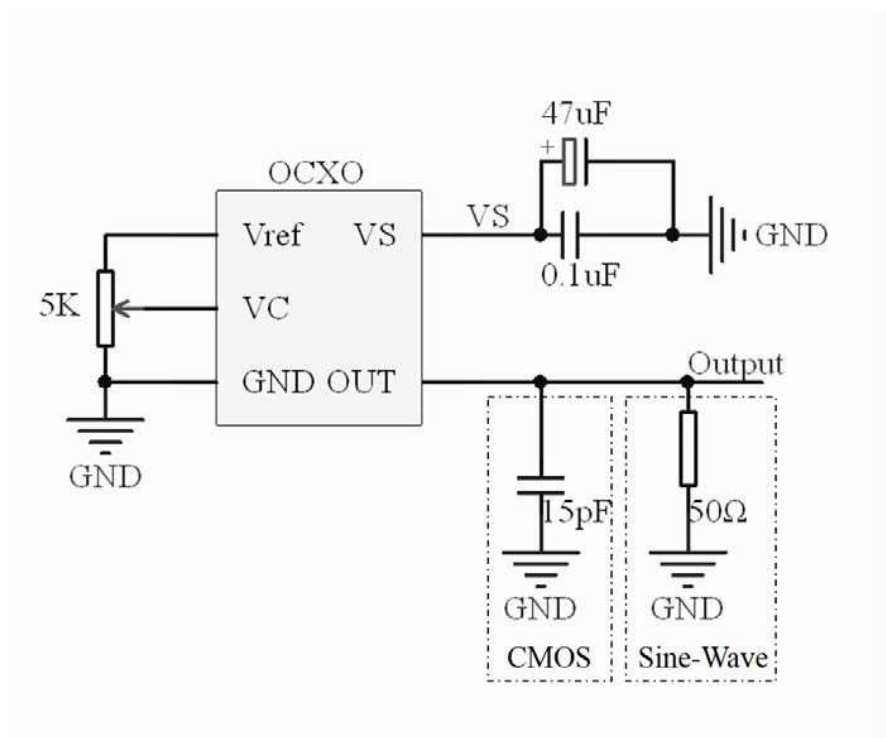
Frequency: 10.000MHz

Parameter		Min	Typ.	Max	Unit	Condition	Note
Frequency Stability							
Frequency			10.000		MHz		
Initial Frequency Accuracy		-100		+100	ppb	V _c =2.5V@25°C after 15mins power on ref to nominal frequency	
Supply Variation		-1.0		+1.0	ppb	V _s ±5%, @25°C	
Load Variation		-1.0		+1.0	ppb	CL±5%, @25°C	
Aging	Per day	-0.5		+0.5	ppb	Aging after 30 days of operation	
	The first year	-50		+50	ppb		
	10 years	-0.2		+0.2	ppm		
Temperature Stability		-1.0		+1.0	ppb	-20°C ~ +70°C refer to 25°C	
Short Term Stability (in still air)				0.5	ppt/s	@25°C, after power on 1hour	
Warm-up time				5.0	min	@+25°C, Within ±20 ppb of final frequency with reference after 1 hour on	
Supply Voltage/Current							
Voltage Supply		11.4	12	12.6	V		
Operating Current				500	mA	during warm up	
				150	mA	at steady state, @25°C	
Output Characteristics							
Sine-Wave	Load		50		Ω		
	Output Level	7.0			dBm		
	Harmonic level			-40	dBc		
Spurious				-80	dBc		
Reference Voltage		4.8	5.0	5.2	V		

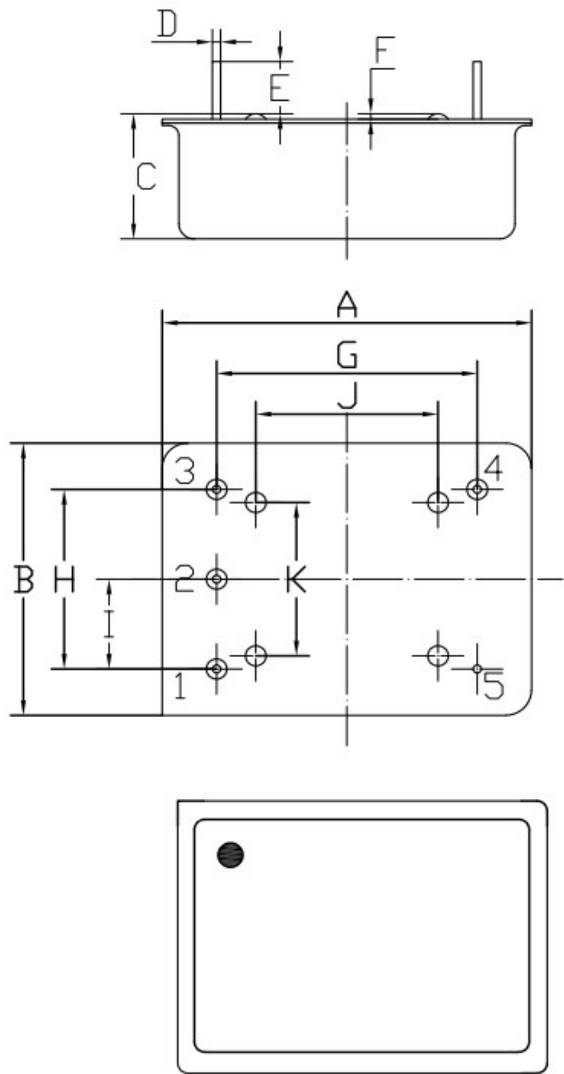
Phase Noise						
Phase Noise			-115	dBc/Hz	@1Hz	
			-135		@10Hz	
			-153		@100Hz	
			-158		@1KHz	
			-160		@10KHz	
			-160		@100KHz	
Voltage Control Characteristics						
Control Voltage Range	0.0	2.5	5.0	V		
Frequency tuning range			-0.3	ppm	Vc=0.0V	
	-100		+100	ppb	Vc=2.5V	
	+0.3			ppm	Vc=5.0V	
Slope	Positive					
Linearity			10	%		
Input Impedance	100			K Ω		
Mechanical specification & Package						
Package Size	Refer to the below drawing					
Pin Connector Size						
Pin Connector Definition						
ROHS	RoHS compliant					

Environmental, Mechanical Conditions	
Operating temperature range	-20°C~+70°C
Operable temperature range	-40°C~+85°C
Storage temperature range	-40°C~+105°C
ESD	HBM.2kV
MSL	MSL.1
Drop Test	The test shall be carried out as the provisions of the IEC60068-2-32 test Ed. 10cm height, 3 times on hard board with thickness of 3cm
Vibration test	The test shall be carried out as the provisions of the IEC60068-2-06 test Fc. Frequency range:10Hz~500Hz Acceleration:10g Displacement:0.75mm@10Hz Sweep time:1.5 hours total (sweep for 30 minutes in each direction)
Mechanical Shock	The test shall be carried out as the provisions of the IEC60068-2-27 test Ed. 50g, 11ms duration, 1/2 sine wave, 3 shocks each direction along 3 mutually perpendicular planes.
Thermal shock	0.5h@-40°C , 0.5h@+85°C , Note: the changing time < 30 seconds, cycling for 100 times

Test Circuit:



Dimensions:



Pin Function:

Pin No.	Pin Function
1	VC
2	Ref
3	VS
4	Output
5	GND

Symbol	Dimension (mm)	
	Min	Max
A		36.4
B		27.4
C		13
D	0.7	0.9
E	4.5	5.9
F	0.4	0.7
G	25.2	25.6
H	17.5	18.0
I	8.80	9.00
J	17.75 nominal	
K	15.21 nominal	