



RFM Integrated Device, Inc.

## PRODUCT SPECIFICATION

Part Number: XOC9009

CXO, 12.8 MHz,  $\pm 200$  ppb @ 25°  
C  $\pm 1^\circ$ C after turn on power 30  
 $\pm 1$  minutes

# 14.3x9.3x6.5mm 12.8MHz OCXO



Characteristics	Values	Unit	Note
Nominal Frequency	12.8	MHz	±200 ppb @ 25°C ±1°C after turn on power 30 ±1 minutes □ 90 days following date code

## Temperature Range

Characteristics	Min.	Nom.	Max.	Unit	Note
Operating	-40		85	°C	

## Power - Consumption

Characteristics	Min.	Nom.	Max.	Unit	Note
Power Supply	3.135	3.3	3.465	V	
Max values at steady state			0.6	W	at 25°C
Max values during Warm-up			600	mA	at turn on

## Output Signal HCMOS

Characteristics	Min.	Nom.	Max.	Unit	Note
Level	VOH	2.4		Volt	
	VOL		0.4	Volt	
Rise/Fall time			10	ns	10% to 90%
Spurious			-60	dBc	
Duty cycle	45		55	%	
Load		15		pF	

## Frequency Stability

Characteristics	Min.	Nom.	Max.	Unit	Note
VS Temperature Range			30	±ppb	-40~85°C refer to (Fmax+Fmin)/2
VS Power Supply variation			2	±ppb	±5% Change
VS Load variation			2	±ppb	±5% Change

## Aging

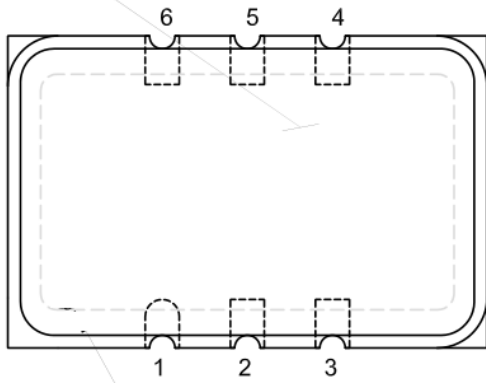
Characteristics	Values			Unit	Note
	1 day	1 Year	10 Years		
Medium/Long Term Stability	1	100	600	±ppb	After continuous operating for 1 month at 25°C
Warm Up	10 min		10	±ppb	Refer to 1 hour on @ 25°C

## Phase Noise

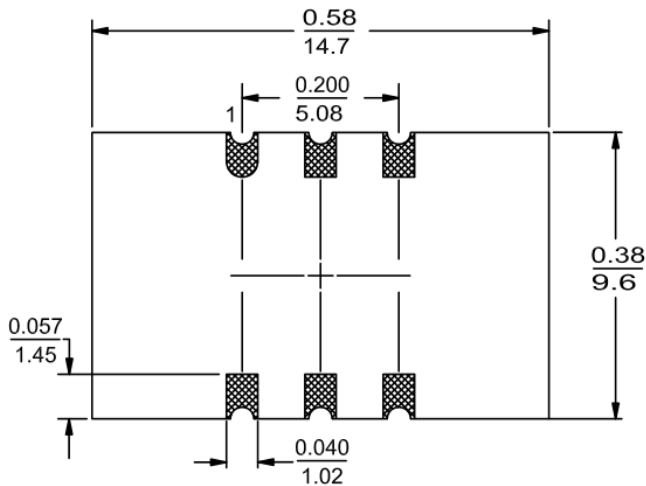
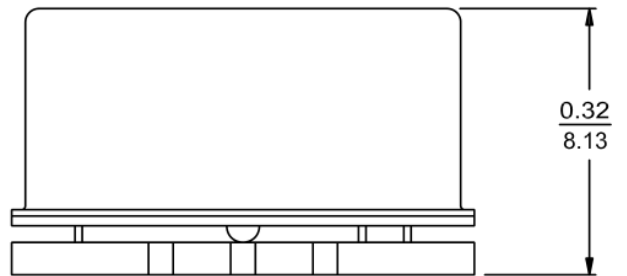
Characteristics	Values						Unit	Note
	10 Hz	100 Hz	1K Hz	10 KHz	100KHz	1M Hz		
Static Conditions	-95	-120	-140	-145	-150	-150	dBc/Hz	Max value

## Mechanical drawing Package

MARKING THIS SURFACE



(VIEW FROM TOP)



(VIEW FROM BOTTOM)

### PIN CONNECTIONS

PIN	FUNCTION
1	VCO INPUT or NOT CONNECTED
2	R.F.ENABLE or NOT CONNECTED
3	0 VOLTS AND CASE
4	R.F. OUTPUT
5	NOT CONNECTED
6	+VDC

### Label (Top view)

