

Specification	AXIOM45-23	Rev.: 1	Date: 2013-12-10
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Oscillator type: OCXO High stability, Sine Wave Output

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency	10.000			MHz	
Frequency stability				ppm	
Initial tolerance		± 500		ppb	@+25°C, V _C = V _{REF} /2
vs. operating temperature range			± 10	ppb	steady state
operating temperature range	-10		+60	°C	
vs. supply voltage variation			± 2	ppb	V _S ± 5%
vs. load change			± 2	ppb	R _L ± 10%
long term stability (aging) per year			± 100	ppb/year	after 30 days operation
Frequency adjustment range					
Electronic Frequency Control (EFC)	± 0.8	± 1		ppm	
EFC voltage V _C	0		V _{REF}	V	
EFC slope (Δf / ΔV _C)	positive				
EFC input impedance	100			kΩ	
RF output					
Signal waveform	Sine wave				
Load	50			Ohm	
Output amplitude	+3			dBm	
Warm-up time @25°C			5	min	Δf _{final} /f ₀ < ±0.1 ppm
Phase noise		-120 -140 -145 -155		dBc dBc dBc dBc	10 Hz 100 Hz 1 k Hz 10 kHz
Short-term stability (ADEV)			5·10 ⁻¹²		τ = 1 sec
Reference voltage VREF output		10.0		V	
Supply voltage V_S	11.4	12.0	12.6	V	
Current consumption (steady state)			100	mA	@ +25°C
Current consumption (warm-up)			250	mA	
Operable temperature range	-30		+75	°C	
Storage temperature range	-40		+85	°C	
Enclosure (see drawing) LxWxH	36.1x27.2x16 max.			mm	IEC 60679-3 CO 08
Weight			30	gram	
Packing	Palette				
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

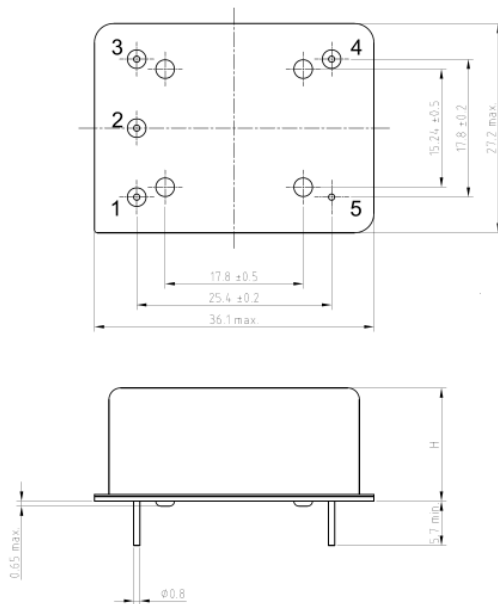
Notes:

- Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated

Ordering Code:

Model (Specification)	Rev.	Frequency [MHz]
AXIOM45-23	Rev.1	10.000

Enclosure:



Pin connections

Pin #	Symbol	Function
1	V _C	Control Voltage (EFC)
2	VREF	Reference Voltage
3	V _S	Supply Voltage
4	RF OUT	RF Output
5	GND	Ground

Environmental conditions:

Test	IEC 60068 Part ...	IEC 60679-1 clause ...	Test conditions
Sealing tests (if applicable)	2-17	4.6.2	Gross leak: Test Qc, Fine leak: Test Qk
Solderability Resistance to soldering heat	2-20 2-58	4.6.3	Test Ta (235 ± 5)°C Method 1 Test Tb Method 1A, 5s
Shock*	2-27	4.6.8	Test Ea, 3 x per axes 100g, 6 ms half-sine pulse
Vibration, sinusoidal*	2-6	4.6.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g
Endurance tests - ageing - extended aging		4.7.1 4.7.2	30 days @ 85°C, OCXO @ 25°C 1000h, 2000h, 8000h @ 85°C

Revision History

Rev.	Drawing	Date [dd.mm.yyyy]	Remarks	Author	Checked
1	D0	02.12.2013	First issue	BN	BN
1	D1	10.12.2013	Editorial changes	HH	HH