

Specification	AXIOM110-500	Issue: 01	Date: 2008-09-22
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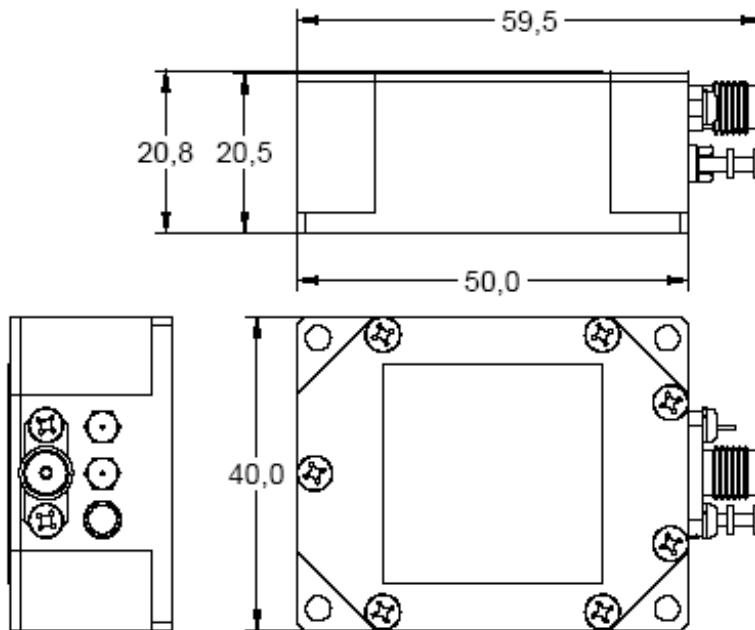
Oscillator type : OCXO with SMA connector and Low Phase Noise

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency	120.000			MHz	
Frequency stability					
Initial tolerance at delivery			± 0.1	ppm	@+25°C, V _C = 0V± 0.2V
vs. temperature in operating temperature range			± 0.5	ppm	-40°C~+85°C
vs. supply voltage variation			± 50	ppb	V _S ± 5%
vs. load change			± 50	ppb	R _L ± 5%
Long term (aging) per day			± 70	ppb/day	
Long term (aging) 1 st year			± 2	ppm	
Long term (aging) following years			± 0.5	ppm	
Frequency adjustment range					
Electronic Frequency Control (EFC)	± 2		± 5	ppm	
EFC voltage V _C	-4	0	+4		
EFC slope (Δf / ΔV _C)	negative				
EFC linearity					
EFC input impedance	50			kΩ	
RF output					
Signal waveform	Sine wave				
Load R _L	50			Ω	
Output level	+ 10	+12	+14	dBm	
Harmonics			-30	dBc	
Spurious			-85	dBc	
Warm-up time			5	min	Δf/f ₀ < ± 0.5 ppm
Phase noise in quiet state			-90	dBc/Hz	@ 10 Hz
			-120	dBc/Hz	@ 100 Hz
			-155	dBc/Hz	@ 1 kHz
			-165	dBc/Hz	@ 10 kHz
			-170	dBc/Hz	@ 100 kHz
Supply voltage V_S	14.25	15	15.75	V	
Current consumption (steady state)			350	mA	@ +25°C
Current consumption (warm-up)			500	mA	
Operating temperature range	-40		+85	°C	
Operable temperature range	-45		+90	°C	
Storage temperature range	-50		+100	°C	
Enclosure	50 x 40 x 20.8			mm	see drawing
Weight			100	gram	
RF output connector	SMA-F				

Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1 and MIL-PRF-55310, unless otherwise stated

Enclosure drawing



Environmental conditions

Test	IEC 60068 Part ...	IEC 60679-1 clause ...	Test conditions
Shock*	2-27	4.6.8	Test Ea, 3 x per axes 30g, 18 ms half-sine pulse
Vibration, sinusoidal*	2-6	4.6.7	Test Fc, 6 cycles per axes, 100 Hz - 2 kHz, 6 g
Endurance tests - ageing - extended aging		4.7.1 4.7.2	30 days @ 85°C, OCXO @25°C 1000h, 2000h, 8000h @85°C