

Specification	AXE1000	Issue: 3.1	Date: 2011-01-29
Oscillator type: Low Noise Crystal Oscillator (PXO) 1000 MHz			

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency	1000.00			MHz	Note 2
Frequency stability				ppm	
Initial tolerance			±5	ppm	@25°C
vs. operating temperature range			±50	ppm	Note 3
operating temperature range	-20		+70	°C	
vs. supply voltage variation (pushing)			±1	ppm	V _S ±5%
vs. load change			±1	ppm	R _L ±5%
long term (aging) 1 st year			±2	ppm	@ +25°C
long term (aging) following years			±1	ppm	per year @ +25°C
Frequency adjustment range					
Electronic frequency control (EFC)		n.a.			
RF output					
Signal waveform	Sine wave				R _L = 50Ω
Output level	+7	+11		dBm	
Harmonics		-50	-40	dBc	
Sub-harmonics (multiples of 100 MHz)		-45	-40	dBc	
Spurious			-80	dBc	
Phase noise		-140	-135	dBc/Hz	@ 10 kHz
		-145	-140	dBc/Hz	@ 100 kHz
		-147	-145	dBc/Hz	@ 1 MHz
Start-up time		10	20	ms	
Supply voltage V_S	11.4	12	12.6	V	
Current consumption (steady state @ +25°C)			60	mA	
Operable temperature range	-40		+90	°C	
Storage temperature range	-55		+105	°C	
Enclosure (see drawing) (LxWxH)	54 x 40 x 19			mm	h = 2.0 mm
Weight				gram	
Packing	Palette				
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

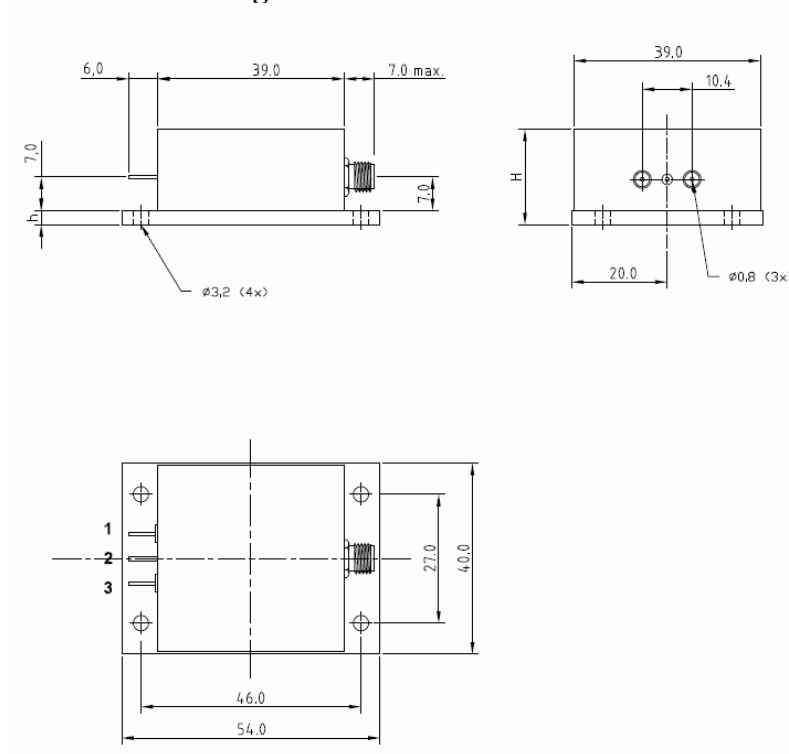
Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. Other frequencies on request
3. Other stabilities on request

Ordering Code:

Model (Specification)	Frequency [MHz]
AXE1000	1000.000

Enclosure drawing



Pin connections

Pin#	Symbol	Function
1	N.C.	No Connection
2	GND	Ground
3	V_S	Supply Voltage
SMA	RF OUT	RF Output

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
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 6 axes 50G, 11 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

*Endurance test

Revision History

Rev.	Date [dd.mm.yy]	Remarks
1	12.12.2006	First issue AXE1000-11
2	25.01.2008	Freq. stability, temp. range & output level changed
3	17.12.2010	Freq. stability, RF output, phase noise & enclosure drawing changed
3.1	29.01.2011	Package height H and thickness of base plate (h) changed: PCN11012901