AXTAL ADVANCED XTAL PRODUCTS

Specification	AXE1200	Issue: 04	Date: 2008-01-25

Oscillator type : Crystal Oscillator (PXO) 1200 MHz

Parameter	min.	typ.	max.	Unit	Condition
Nominal frequency		1 200		MHz	
Frequency stability				ppm	
Initial tolerance			±1	ppm	@25°C
vs. temperature in operating temperature range			±50	ppm	Steady state
operating temperature range	-30		+85	°C	
vs. supply voltage variation			±0.2	ppm	V_S ±5%
vs. load change			±0.1	ppm	Load ±5%
long term (aging) 1st year			±2	ppm	@ +25°C
long term (aging) following years			±1	ppm/y	per year @ +25°C
Frequency adjustment range					
Mechanical (internal trimmer)		N.A.		ppm	N.A.
RF output					
Signal waveform		Sine wave			
Load		50		Ω	±10 %
Amplitude	+7			dBm	
Phase noise		-140 -142	-135 -140 -145	dBc/Hz dBc/Hz dBc/Hz	@ 10 kHz @ 100 kHz @ 1 MHz
Start-up time			10	ms	
Supply voltage V_S	14.25	15	15.75	V	
Current consumption (steady state @ +25°C)			50	mA	@25°C
Operable temperature range	-40		+90	°C	
Storage temperature range	-55		+105	°C	
Enclosure (see drawing) (LxWxH)		54 x 40 x 20		mm	
Weight			60	gram	
Packing		bulk			
ESD Sensitivity	1500			V	HBM as in IEC 61000-4-2

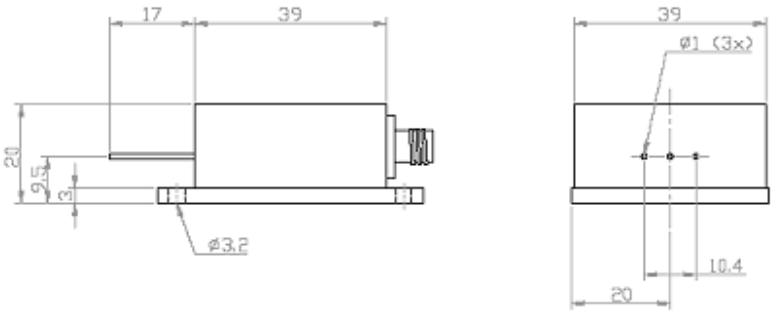
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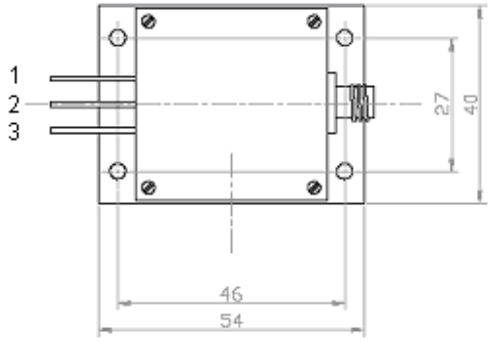
1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated

Ordering Code:

Model (Specification)	Frequency [MHz]
AXE1200	1200

Enclosure drawing





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
Visual inspection, dimensions		4.3	Enclosure styles as in IEC 60679-3 or 61837, if applicable
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
Bump*	2-29	4.6.6	Test Eb, 4000 bumps per Axes, 40g, 6 ms
Vibration, sinusoidal*	2-6	4.6.7	Test Fc, 30 min per axes, 10 Hz - 55 Hz 0,75mm; 55 Hz - 2 kHz, 10g
Rapid change of temperature	2-14	4.6.5	Test Na, 10 cycles at extremes of operating temperature range
Dry heat	2-2	4.6.14	Test Ba, 16 h at upper temperature indicated by climatic category
Damp heat, cyclic*	2-30	4.6.15	Test Db variant 1 severity b), 55°C/95% r.H., 6 cycles
Cold	2-1	4.6.16	Test Aa, 2 h at lower temperature indicated by climatic category
Climatic sequence*	1-7	4.6.17	Sequence of 4.6.14, 4.6.15 (1st cycle), 4.6.16, 4.6.15 (5 cycles)
Damp heat, steady state*	2-3	4.6.18	Test Ca, 56 days
Endurance tests - ageing - extended aging		 4.7.1 4.7.2	 30 days @ 85°C, OCXO @25°C 1000h, 2000h, 8000h @85°C