

Specification	AXE10-14	Issue: 02	Date: 2009-10-19
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Oscillator type : PXO with Low Phase Noise

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	10		100	MHz	
Standard frequencies	22.000 / 40.000			MHz	
Frequency stability				ppm	
Initial tolerance			±2	ppm	
vs. temperature in operating temperature range			±5	ppm	
Operating temperature range	0		+50	°C	Note 2
vs. supply voltage variation			±0.2	ppm	
vs. load change			±0.1	ppm	
long term (aging) 1 st year			±1	ppm	@ 40°C
Frequency adjustment range					
Electronic Frequency Control (EFC)				ppm	N.A.
EFC voltage V_C				V	N.A.
EFC slope ($\Delta f / \Delta V_C$)					
EFC linearity				%	
EFC input impedance				k Ω	
RF output					
Signal waveform	HCMOS				
Load	15			pF	
Rise & decay time			5	ns	
Symmetry (duty cycle)	40		60	%	@ $V_S/2$
Start-up time			4	ms	
Phase noise @ 22 MHz		-95		dBc	10 Hz
		-125		dBc	100 Hz
		-135		dBc	1 kHz
		-140		dBc	10 kHz
		-145		dBc	100 kHz
Supply voltage V_S	2.85	3.0	3.15	V	
Current consumption (steady state)			30	mA	@ +25°C
Enable/disable function					
Operable temperature range	-45		+90	°C	Note 2
Storage temperature range	-55		+105	°C	
Enclosure (see drawing)	14.4x9.5x6 max			mm	IEC 60679-3 or 61837
Weight			3	gram	
Packing	Tape & reel				IEC 60286-3
ESD Sensitivity	1500			V	HBM as IEC 61000-4-2
Construction	RoHS/ Lead(Pb) -free				EU directive 2002/95/EC
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

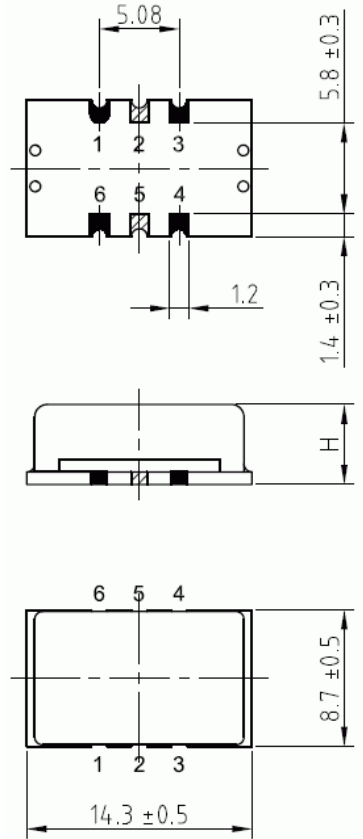
Notes:

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

Ordering Code:

Model (Specification)	Frequency [MHz]
AXE10-14	22.000

Enclosure drawing



Pin connections

Pin #	Symbol	Function
1	N.C.	No Connection
2	N.C.	No Connection
3	GND	Ground
4	RF OUT	RF Output
5	N.C.	No Connection
6	Vs	Supply Voltage

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