

Specification	AXIOM35	Issue: 07	Date: 2010-11-19
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Oscillator type : High stability Miniature OCXO with Sine Wave Output

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	10		100	MHz	
Standard frequencies	10.000 / 20.000 / 100.000			MHz	
Frequency stability				ppm	
Initial tolerance @+25°C			± 500	ppb	V _C @ centre value
vs. temperature in operating temperature range (steady state)			± 200 ± 100 ± 50 ± 25 ± 10 ± 5	ppb ppb ppb ppb ppb ppb	Option II = "200" Option II = "100" Option II = "50" Option II = "25" Option II = "10" Option II = "05"
operating temperature range	-10		60	°C	Note 2
vs. supply voltage variation			± 10	ppb	
vs. load change			± 10	ppb	
Long term (aging) per day, after 30 days operation			± 10 ± 2	ppb ppb	Option II = "200", "100", "50" All other Options II
long term (aging) 1 st year, after 30 days operation			± 200 ± 100	ppb ppb	Option II = "200", "100", "50" All other Options II
Frequency adjustment range					
Electronic Frequency Control (EFC)	± 0.8	± 1		ppm	
EFC voltage V _C	0.15 0.25	1.65 2.5	3.15 4.75	V V	Option I = "33" Option I = "50"
EFC slope (Δf / ΔV _C)	positive				
EFC input impedance	100			kΩ	
RF output					
Signal waveform	Sine wave				
Load	50			Ω	± 10 %
Output level	+3			dBm	Note 4
Harmonics attenuation	-20			dBc	
Warm-up time			5	min	Δf _{final} /f ₀ < ±0.1 ppm
Reference voltage VREF output Note 3		3.0 5.0		V V	Option I = "50" Option I = "12"
Supply voltage V_S	4.75 11.4	5.0 12	5.25 12.6	V V	Option I = "50" Option I = "12"
Current consumption (steady state) @ +25°C			200 100	mA mA	Option I = "50" Option I = "12"
Current consumption (warm-up)			500 250	mA mA	Option I = "50" Option I = "12"
Operable temperature range	-20		+70	°C	
Storage temperature range	-40		+85	°C	
Enclosure (see drawing) L x W x H	20.5x20.5x12 max.			mm	IEC 60679-3 CO 15
Weight			10	gram	
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

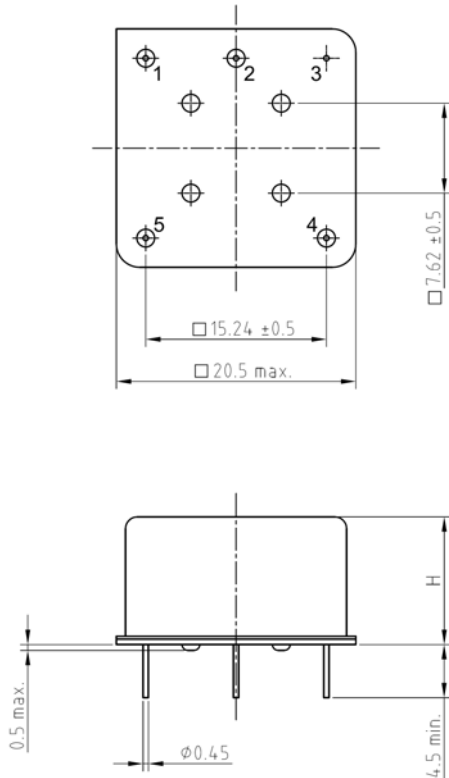
Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. Other operating temperature range on request
3. Other reference voltages on request
4. Higher output level on request

Ordering Code:

Model (Specification)	Option I Supply voltage	Option II Stability	Frequency [MHz]
AXIOM35	12	100	10.000

Enclosure drawing



Pin connections

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

Other environmental conditions on request