

<b>Specification</b>	<b>AXIS100-03</b>	Issue: 03	Date: 2005-06-10
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**Oscillator type : VCXO**

Parameter	min.	typ.	max.	Unit	Condition
<b>Frequency range</b>				MHz	
<b>Standard frequencies</b>	38,900			MHz	
<b>Frequency stability</b>				ppm	
Initial tolerance			± 100	ppm	@V <sub>C</sub> = 0V
vs. temperature in operating temperature range (-10°~+60°C)			± 100	ppm	
vs. supply voltage variation				ppm	
vs. load change				ppm	
long term (aging)	-20		20	ppm/year	@ 40°C
<b>Frequency adjustment range</b>					
Electronic Frequency Control (EFC) range @ 25°C	± 60			kHz	
EFC voltage V <sub>C</sub>	-10		10	V	
EFC slope (Δf / ΔV <sub>C</sub> )	negative				
EFC linearity		± 3		%	
Control bandwidth	30			KHz	
<b>RF output</b>					
Signal waveform	SINUS				
Amplitude	+0		+3	dBm	R <sub>L</sub> = 50 Ω
Harmonics attenuation	30			dBc	
Subharmonics attenuation	40			dBc	
Nonarmonics attenuation	50			dBc	
<b>Supply voltage V<sub>s</sub></b>	11,4	12	12,6	V	
<b>Current consumption</b> (steady state)			60	mA	
<b>Operable temperature range</b>	-20		+70	°C	
<b>Storage temperature range</b>	-40		+85	°C	
<b>Enclosure (see drawing) LxWxH</b>	36.1x27.2x10.5 max.			mm	Similar to IEC 60679-3 CO 09
<b>Weight</b>			20	gram	
<b>Packing</b>	bulk				IEC 60286-3
<b>ESD Sensitivity</b>	1500			V	HBM, IEC 61000-4-2

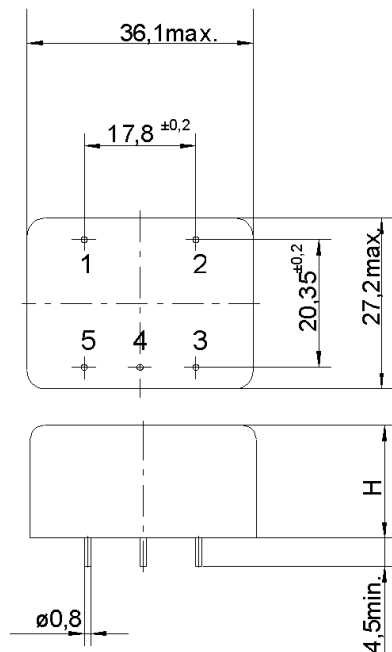
**Notes:**

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

**Ordering Code:**

Model (Specification)	Frequency [MHz]
AXIS100-03	38,900

## Enclosure drawing



## Pin connections

Pin #	Symbol	Function
1	GND	Ground
2	V <sub>S</sub>	Supply Voltage
3	V <sub>C</sub>	Control Voltage (EFC)
4	GND	Ground
5	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
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
Bump*	2-29	4.6.6	Test Eb, 4000 bumps per Axes, 40g, 6 ms
Free fall*	2-32	4.6.9	Test Ed procedure 1, 2 drops from 1m height
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 (1 <sup>st</sup> 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