

Specification	AXIS50-11	Issue: 06	Date: 2006-03-16
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Oscillator type : UHF VCXO with LVPECL or Sinus Output

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	60		350	MHz	
Standard frequencies	60 / 93.333 / 186.667 / 213.3 / 311.040			MHz	
Frequency stability				ppm	
Initial tolerance				ppm	
vs. temperature in operating temperature range (-20°~+50°C)			± 10	ppm	-20°C ~ +50°C
vs. supply voltage variation	-0.1		0.1	ppm	
vs. load change	-0.1		0.1	ppm	
long term (aging)			± 2	ppm/year	@ 40°C
Long term aging over 10 years			± 10	ppm	
Frequency adjustment range					
Electronic Frequency Control (EFC) range @ 25°C	± 15			ppm ppm	
EFC voltage V_C	0.15		3.15	V	
EFC slope ($\Delta f / \Delta V_C$)	positive				
EFC linearity				%	
EFC input impedance	100			k Ω	
RF output					
Signal waveform	SINUS LVPECL Complementary				Option S Option L
Amplitude (Option S)	-3			dBm	$R_L = 50 \Omega$
Anharmonics attenuation (Option S)		40		dB	
Output Levels (Option L)					-20°C ~ +50°C $R_L = 50 \Omega$ to $V_S - 2 V$ Note 2
HIGH (V_{OH})	2,215	2,345	2,420	V	
LOW (V_{OL})	1,470	1,595	1,745	V	
Supply voltage V_S	3.15	3.3	3.45	V	
Current consumption (steady state)			40	mA	
Operable temperature range	-30		+60	°C	
Storage temperature range	-40		+85	°C	
Enclosure (see drawing)	20.5x20.5x10.5 max.			mm	IEC 60679-3 or 61837
Weight			5	gram	
Packing	bulk				IEC 60286-3
ESD Sensitivity	1500			V	HBM, IEC 61000-4-2

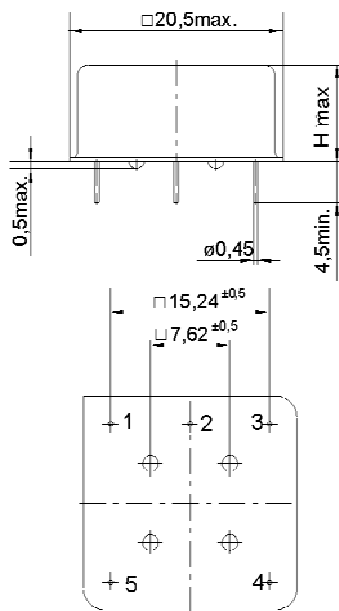
Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. Output parameters vary 1:1 with V_S

Ordering Code:

Model (Specification)	Option	Frequency [MHz]
AXIS50-11	S	311.040

Enclosure drawing



Pin connections:

Pin #	Symbol	Function
1	N.C. \bar{Q}	No Connection (Option S) RF Output (\bar{Q}) (Option L)
2	RF OUT	RF Output (Q)
3	GND	Ground
4	V_C	Control Voltage (EFC)
5	V_S	Supply Voltage

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 st 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