

Specification	AXE40	Issue: 01	Date: 2009-12-18
Oscillator type : VHF/UHF PXO with LVPECL or Sine Wave Output			
with low phase noise and low jitter (no PLL)			

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	60		400	MHz	
Standard frequencies				MHz	
Frequency stability				ppm	
Initial tolerance			± 5	ppm	
vs. temperature in operating temperature range			± 10	ppm	Note 3
Operating temperature range	-20		+70	°C	
vs. supply voltage variation			± 2	ppm	
vs. load change			± 2	ppm	
long term (aging)			± 2	ppm/year	@ 40°C
Frequency adjustment range					
Electronic Frequency Control (EFC)		N.A.		ppm	N.A.
RF output					
Signal waveform		Sine Wave LVPECL Complementary			Option 1 = "S" Option 1 = "L"
Output Level (Option 1 = "S")	+0			dBm	R _L = 50 Ω (Note 6)
Output Levels (Option 1 = "L")					
HIGH (V _{OH})	2.215	2.345	2.420	V	R _L = 50 Ω to V _S - 2 V Note 4
LOW (V _{OL})	1.470	1.595	1.745	V	
Supply voltage V_S	3.15	3.3	3.45	V	Option 2 = "33"
	4.75	5.0	5.25	V	Option 2 = "50"
Current consumption (steady state)		40		mA	Note 5
Operable temperature range	-40		+85	°C	
Storage temperature range	-45		+95	°C	
Enclosure (see drawing) (LxWxH)	20.5x20.5x12.5 max.			mm	IEC 60679-3 CO 15
Weight			5	gram	
Packing	Palette				IEC 60286-3
ESD Sensitivity	1500			V	HBM, IEC 61000-4-2
Handling and Testing	In accordance with AXAN-011				www.axtal.com
Processing	In accordance with AXAN-012				www.axtal.com

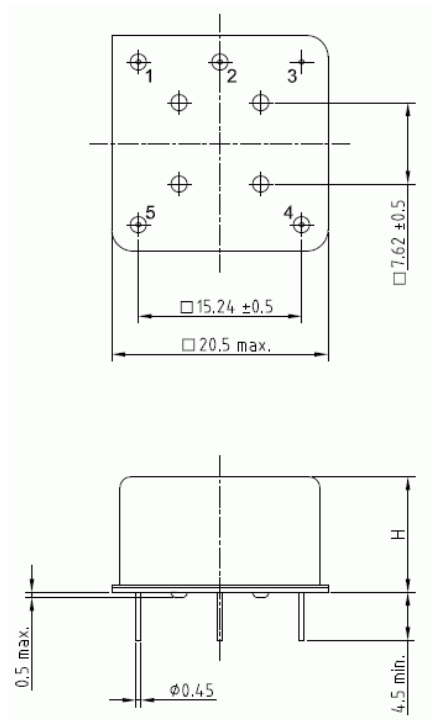
Notes:

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
2. Frequency stability = initial tolerance + temp. stability + supply and load variations + aging 1st year
3. Other stabilities over temperature on request
4. Output levels vary 1:1 with V_S
5. Current consumption depends on frequency, supply voltage and output option
6. Higher Output Level on request

Ordering Code:

Model (Specification)	Option 1	Option 2	Frequency [MHz]
AXE40	S	50	350.000

Enclosure drawing



Pin connections:

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

Other environmental conditions on request