

Specification	AXE10L(E)	Issue: 02	Date: 2009-10-19
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Oscillator type : PXO (Clock) with LVDS Output

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	1.000		800	MHz	
Frequency stability (see Note 1)			±25 ±50	ppm ppm	Option II = "070" Option II = "485"
Initial tolerance				ppm	Included in "frequency stability"
vs. temperature in operating temperature range (steady state)				ppm	
vs. supply voltage variation			±3	ppm	
vs. load change			±1	ppm	Load ±5%
long term (aging) per year			±3	ppm	per year @ +25°C
Frequency adjustment range					
Electronic Frequency Control (EFC) range				ppm	N.A.
RF output					
Signal waveform	LVDS				
Load	50			Ω	
Rise & decay time			1	ns	20%~80% of waveform
Symmetry (duty cycle)	45		55	%	@ 50% of waveform
Start-up time			10	ms	
Jitter			1	ps	r.m.s. 10 kHz ~ 20 MHz
Supply voltage V_S	3.13 4.75	3.3 5.0	3.47 5.75	V V	Option I = "33" Option I = "50"
Current consumption (steady state @ +25°C)			25 ... 120	mA	Note 4
Enable/disable function (pin 1)	Not applicable				AXE10L
	V _L > 0.8 V: Enable V _H > 2.0 V or OPEN: Disable				AXE10LE
Operating temperature range	0 -40		+70 +85	°C °C	Option II = "070" Option II = "485"
Operable temperature range	-45		+90	°C	
Storage temperature range	-55		+105	°C	
Enclosure (see drawing) (LxWxH)	14.8x9.8x5.5 max			mm	IEC 61837 CO 27
Weight			3	gram	
Packing	Tape & reel				IEC 60286-3
ESD Sensitivity	1500			V	HBM as in 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

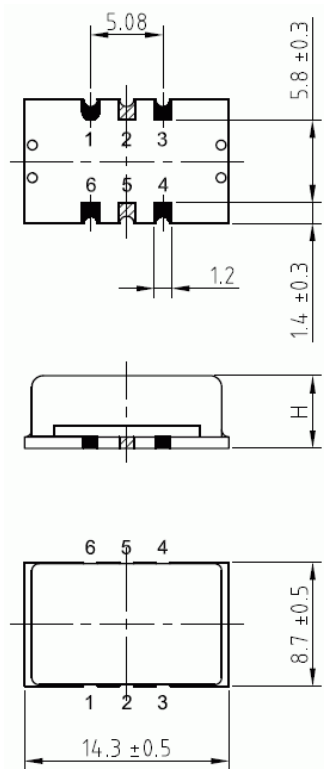
Notes:

1. Frequency stability = initial tolerance + temp.stability
2. Absolute Pull Range (APR) = EFC range - temperature stability - supply & load change - aging
3. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated
4. Max. current consumption depends on frequency and on load

Ordering Code:

Model (Specification)	Option I	Option II	Frequency [MHz]
AXE10L	50	070	155.520
AXE10LE			

Enclosure drawing



Pin connections

AXE10L:

Pin #	Symbol	Function
1	N.C.	No Connection
2	N.C.	No Connection
3	GND	Ground
4	RF OUT1	RF Output
5	RF OUT2	Complementary RF Out
6	Vs	Supply Voltage

AXE10LE:

Pin #	Symbol	Function
1	E/D	Enable/Disable
2	N.C.	No Connection
3	GND	Ground
4	RF OUT1	RF Output
5	RF OUT2	Complementary RF Out
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