

Specification	AXE10P(E)	Issue: 01	Date: 2005-06-08
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Oscillator type : PXO (Clock) with PECL Output

Parameter	min.	typ.	max.	Unit	Condition	
Frequency range	19.440		212.5	MHz		
Standard frequencies	125.000 / 155.520			MHz		
Frequency stability	-25		25	ppm	(see Note 1)	
Initial tolerance				ppm	Included in "frequency stability"	
vs. temperature in operating temperature range (steady state)				ppm		
vs. supply voltage variation			±3	ppm		V _S ±5%
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	PECL					
Load	50			Ω	To V _{EE}	
Rise & decay time			1	ns	20%~80% of waveform	
Symmetry (duty cycle)	40		60	%	@ 50% of waveform	
Start-up time			10	ms		
Jitter			1	ps	r.m.s. 10 kHz ~ 20 MHz	
Supply voltage V_S	3.13	3.3	3.47	V	Option I = "33"	
	4.75	5.0	5.75	V	Option I = "50"	
Current consumption (steady state @ +25°C)			120	mA	Option I = "33"	
			80	mA	Option I = "50"	
Enable/disable function	Not applicable				AXE10P	
	Pin2 = "LOW": Enable				AXE10PE	
	Pin2 = "HIGH": Disable					
Operating temperature range	0		+70	°C	Option II = "070"	
	-40		+85	°C	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 26(AXE10P) CO 27 (AXE10 PE)	
Weight			3	gram		
Packing	Tape & reel				IEC 60286-3	
ESD Sensitivity	1500			V	HBM as in IEC 61000-4-2	

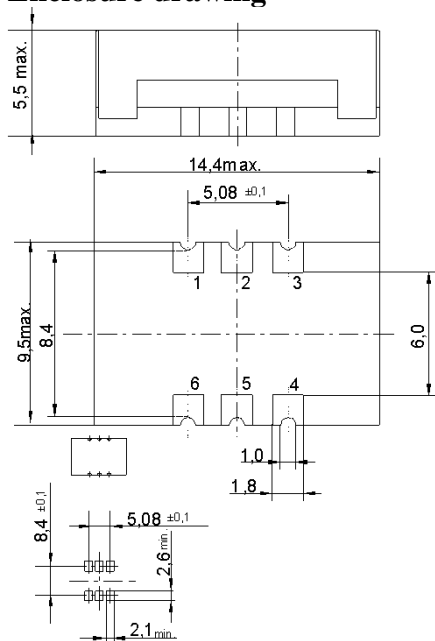
Notes:

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

Ordering Code:

Model (Specification)	Option I	Option II	Frequency [MHz]
AXE10P	50	070	155.520
AXE10PE			

Enclosure drawing



Pin connections

AXE10P:

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

* Note: Pins 2 and 5 may not be present

AXE10PE:

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