

<b>Specification</b>	<b>AXE10P(E)</b>	Issue: 02	Date: 2008-08-27
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**Oscillator type : PXO (Clock) with PECL Output**

Parameter	min.	typ.	max.	Unit	Condition
<b>Frequency range</b>	19.440		212.5	MHz	
<b>Standard frequencies</b>	125.000 / 155.520			MHz	
<b>Frequency stability</b>	-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	
vs. load change			±1	ppm	Load ±5%
long term (aging) per year			±3	ppm	per year @ +25°C
<b>Frequency adjustment range</b>					
Electronic Frequency Control (EFC) range				ppm	N.A.
<b>RF output</b>					
Signal waveform	PECL				
Load	50			Ω	To V <sub>EE</sub>
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
<b>Supply voltage V<sub>S</sub></b>	3.13	3.3	3.47	V	Option I = "33"
	4.75	5.0	5.75	V	Option I = "50"
<b>Current consumption (steady state @ +25°C)</b>			120	mA	Option I = "33"
			80	mA	Option I = "50"
<b>Enable/disable function</b>	Not applicable				AXE10P
	Pin2 = "LOW": Enable				AXE10PE
	Pin2 = "HIGH": Disable				
<b>Operating temperature range</b>	0		+70	°C	Option II = "070"
	-40		+85	°C	Option II = "485"
<b>Operable temperature range</b>	-45		+90	°C	
<b>Storage temperature range</b>	-55		+105	°C	
<b>Enclosure (see drawing) (LxWxH)</b>	14.8x9.8x5.5 max			mm	IEC 61837 CO 26(AXE10P) CO 27 (AXE10 PE)
<b>Weight</b>			3	gram	
<b>Packing</b>	Tape & reel				IEC 60286-3
<b>ESD Sensitivity</b>	1500			V	HBM as in IEC 61000-4-2

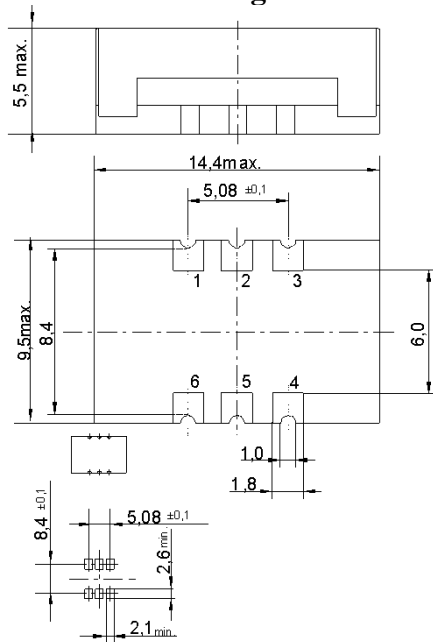
**Notes:**

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	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

### AXE10PE:

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
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