

<b>Specification</b>	<b>AXE7050P</b>	Issue: 03	Date: 2009-09-29
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**Oscillator type : Programmable Crystal Oscillator in 5x7 mm package**

Parameter	min.	typ.	max.	Unit	Condition
Frequency range	1		133	MHz	V <sub>S</sub> = 5 V
	1		100	MHz	V <sub>S</sub> = 3.3 V
	1		66	MHz	V <sub>S</sub> = 2.7 V
<b>Programmable frequencies</b>	Any discrete frequency				At delivery
<b>Frequency stability</b>					
Overall stability			± 100 ± 50 ± 25	ppm ppm ppm	Option I = "100" Option I = "50" Option I = "25"
operating temperature range	0		+70	°C	Option II = "A"
	-20		+70	°C	Option II = "B"
	-40		+85	°C	Option II = "C"
long term (aging)			± 5	ppm/year	@ 40°C
<b>RF output</b>					
Signal waveform	HCMOS				
Load	15			pF	
Rise & decay time			5	ns	
Symmetry (duty cycle)	40		60	%	@ V <sub>S</sub> /2
Start-up time			10	ms	
Jitter (peak-to-peak)		65	100	ps	Freq ≤ 33 MHz
		65	80	ps	Freq > 33 MHz (5V)
<b>Output Enable/Disable (OE) Input</b>	Open or HIGH: RF output LOW: Tri-state output				
<b>Supply voltage V<sub>S</sub></b>	2.5	2.7	3.0	V	Option III = "27"
	3.15	3.3	3.45	V	Option III = "33"
	4.75	5.0	5.25	V	Option III = "50"
<b>Current consumption (steady state)</b>			20	mA	Option III = "27"
			25	mA	Option III = "33"
			45	mA	Option III = "50"
<b>Operable temperature range</b>	-45		+90	°C	
<b>Storage temperature range</b>	-55		+125	°C	
<b>Enclosure (see drawing)</b>	7.15 x 5.15 x 1.8 max.			mm	IEC 61837-2
<b>Weight</b>			5	gram	
<b>Packing</b>	Bulk or T&R				IEC 60286-3
<b>ESD Sensitivity</b>	1500			V	HBM, IEC 61000-4-2

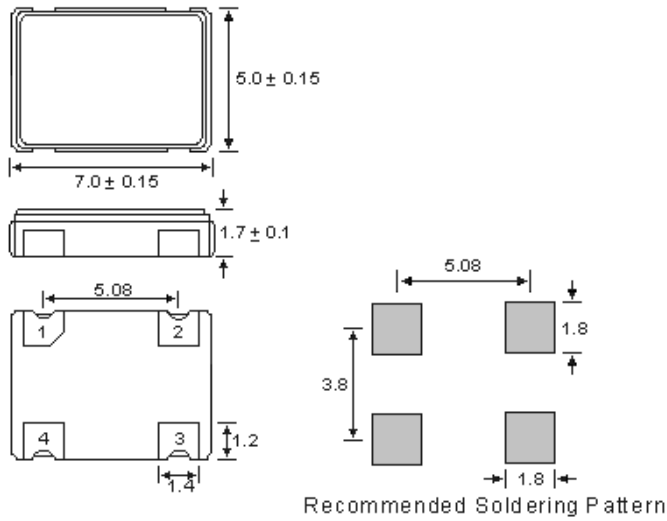
**Notes:**

1. Terminology and test conditions are according to IEC standard IEC60679-1, unless otherwise stated

**Ordering Code:**

Model (Specification)	Option I	Option II	Option III	Frequency [MHz]
AXE7050P	100	A	50	12.345678

## Enclosure drawing



## Pin connections

Pin #	Symbol	Function
1	OE	Output Enable/Disable
7	GND	Ground
8	RF OUT	RF Output
14	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 ( $235 \pm 5$ )°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