

Programmable Crystal Oscillator

YSO691ER Low Jitter



Applications

- Any frequency

Features

- One time programmable
- PLL circuit provides wide frequency range application (1-200MHz)
- Low jitter design with new developed IC
- Package Size: 5.0*3.2, 7.0*5.0mm



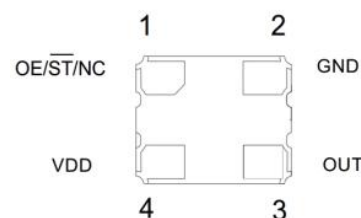
Specifications (规格参数)

Item / Type	CMOS		
Parameter	1.8 V	2.5 V	3.3 V
Frequency Range	1MHz to 125MHz	1MHz to 200MHz	1MHz to 200MHz
Supply Voltage Variation (Vdd)10%	1.62V~1.98V	2.25V~2.75V	2.97V~3.63V
Standby Current	400uA		
Frequency Tolerance	±30ppm, ±50ppm or specify		
Output Load	15pF		
Operating Temperature Range	-40~+85°C, -40~+125°C, or specify		
Storage Temperature Range	-55~+150°C		
Voltage Vol (Max.) / Vol (Min.)	VOH = 90%Vdd/VOL = 10%Vdd		
Duty Cycle	45~55%		
Start-up Time	7ms Max		
Period Jitter (@12K-20Mhz)	1.8V < 1.5ps 2.5V < 1.1ps 3.3V < 1ps		
Supply Current	See Below		
Frequency Aging (at 25°C)	±3 ppm / year Max		

Pin Dimension (脚位尺寸)

Pin	Symbol	Functionality	
1	OE/ST/NC	Output Enable	H: specified frequency output L: output is low. Specified frequency output stop.
		Standby	H: specified frequency output L: output is low. Device goes to sleep mode. Supply current reduces to 400uA(Standby Current).
		No Connect	Pin 1 = VDD or Pin 1 is Open : Specified frequency output.Pin 1 has no function
2	GNG	Power	Electrical ground
3	OUT	Output	Oscillator output
4	VDD	Power	Power supply voltage

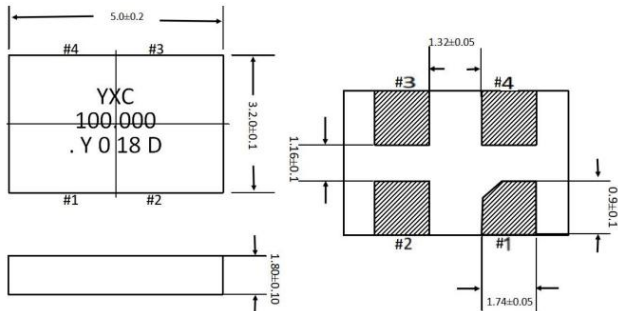
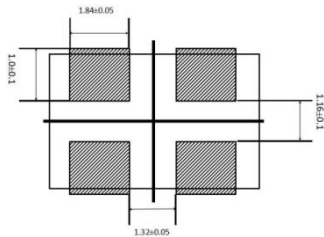
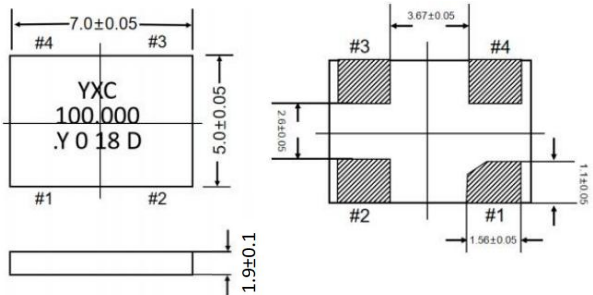
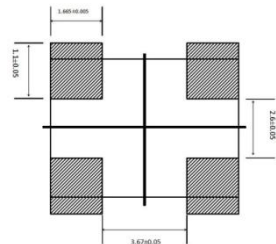
Pin Assignments



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Dimensions and Recommended land pattern (外观尺寸及推荐焊盘)

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
5.0*3.2mm  Top view dimensions: 5.0±0.2 (width), 3.2±0.1 (height). Pin locations: #1 (bottom-left), #2 (bottom-right), #3 (top-right), #4 (top-left). Markings: YXC, 100,000, .Y 0 18 D. Side view dimensions: 1.80±0.10 (height). Bottom view dimensions: 1.74±0.05 (width), 0.9±0.1 (height).	 Land pattern dimensions: 1.84±0.05 (width), 1.16±0.1 (height), 1.32±0.05 (width), 1.0±0.1 (height).
7.0*5.0mm  Top view dimensions: 7.0±0.05 (width), 5.0±0.05 (height). Pin locations: #1 (bottom-left), #2 (bottom-right), #3 (top-right), #4 (top-left). Markings: YXC, 100,000, .Y 0 18 D. Side view dimensions: 1.9±0.1 (height). Bottom view dimensions: 1.56±0.05 (width), 1.1±0.05 (height).	 Land pattern dimensions: 1.85±0.05 (width), 1.1±0.05 (height), 2.6±0.05 (height), 3.67±0.05 (width).

Test Circuit (测试电路)

