

Crystal Oscillator

AEC-Q200

YSO140TC



Applications

- Automotive electronics

Features

- Frequency range: 1MHz-54MHz
- AEC-Q200.

- Package Size: 1.6*1.2, 2.0*1.6, 2.5*2.0, 3.2*2.5, 5.0*3.2, 7.0*5.0mm



Specifications (规格参数)

Item	Symbol	Specifications
Frequency Range (额定频率范围)	f _o	1MHz to 54MHz, or specify
Supply Voltage (电源电压)	V _{cc}	1.8V~3.3V
Output Type (输出方式)	-	CMOS
Frequency Tolerance (频率偏差) (at 25°C)	f _{tol}	±50ppm, ±100ppm, or specify
Operating Temperature (工作温度)	T _{use}	-40~+125°C, or specify
Storage Temperature (储存温度)	T _{stg}	-55~+150°C
Duty Cycle (占空比)	SYM	45~55%
Start-up Time (启动时间)	t _{str}	3ms Max.
Rise Time/Fall Time (上升沿/下降沿)	tr/tf	5ns Max
Phase Jitter [12 kHz ~ 20 MHz] (相位抖动)	tpj	0.7ps max
Frequency Aging (老化) (at 25°C)	f _{age}	±3ppm/year Max.

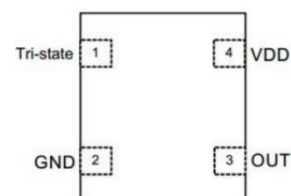
Current Consumption (消耗电流)

Supply Voltage (V)	Power Dissipation V _{cc} =1.8~3.3V 15pF only	
	1.000~40.000MHZ	41.000~54.000MHZ
1.8V	4mA max	9mA max
2.5V	4.5mA max	10mA max
3.3V	5mA max	12mA max

Pin Dimension

Pin	#1	#2	#3	#4
FUNCTION	Tri-state	GND	OUTPUT	VDD

Pin Assignments



*The picture on the right is only for PIN function description.

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

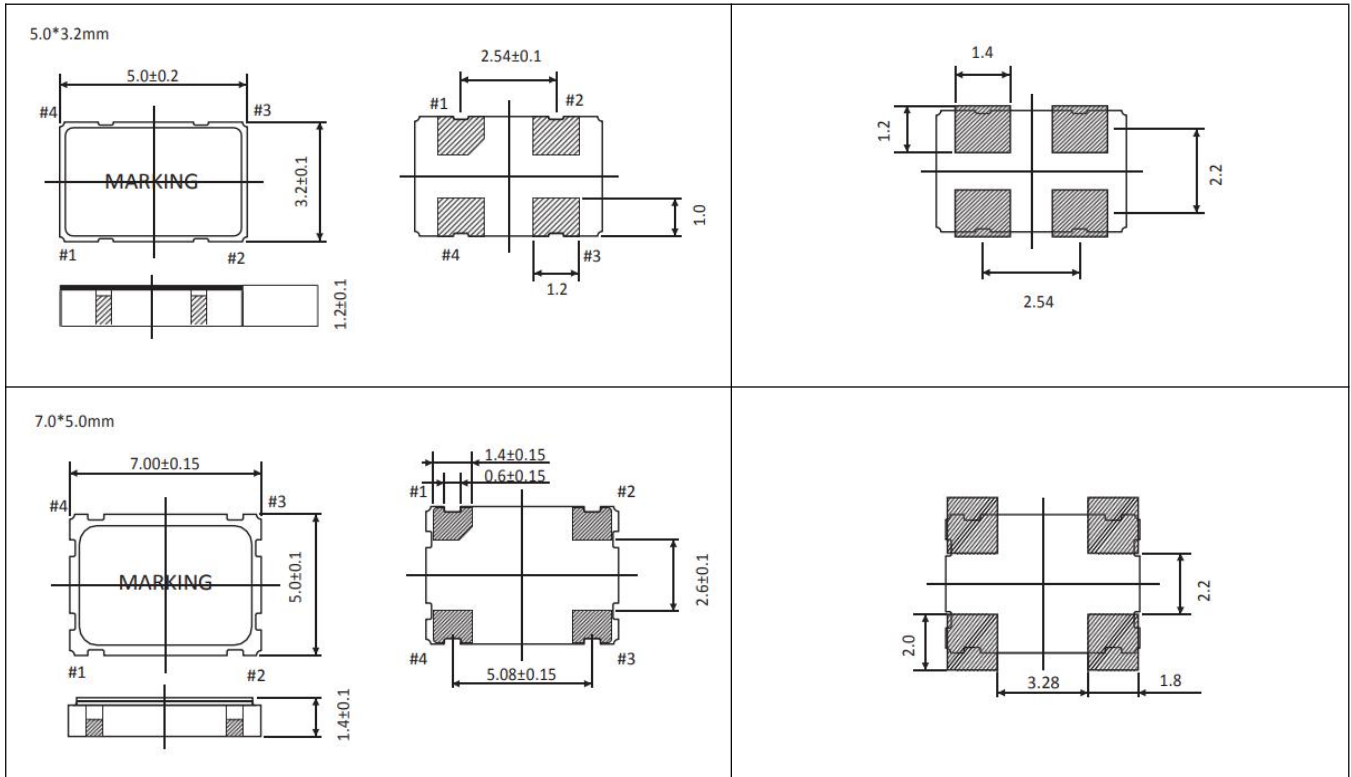
Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
<p>1.6*1.2mm</p>	
<p>2.0*1.6mm</p>	
<p>2.5*2.0mm</p>	
<p>3.2*2.5mm</p>	

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Notes:
1. A capacitor of value 0.01µf~0.1µf or higher between Vdd and GND is required.

Test Circuit (测试电路)

