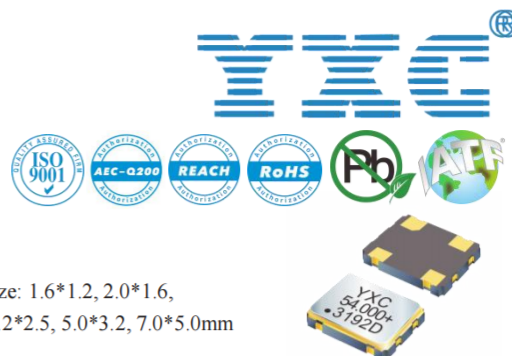


Crystal Oscillator AEC-Q200 YSO140TC



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_0	1 ~ 54MHz, or specify
Supply Voltage 电源电压	VDD	1.8V ~ 3.3V
Output Type 输出方式	-	CMOS
Frequency Tolerance over Operating Temperature Range 频率频差	f_{tol}	$\pm 50\text{ppm}$, $\pm 100\text{ppm}$, or specify
Output Load 输出负载	L_{cmos}	15pF
Operating Temperature 工作温度	T_{use}	-40 ~+ 125°C, or specify
Storage Temperature 储存温度	T_{stg}	-55 ~+ 150°C
Output Voltage 输出电压	Voh	90%VDD Min
	Vol	10%VDD Max
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	t_r/t_f	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}	$\pm 3\text{ppm/year}$ Max
Tri-State	Enable (High Voltage or Floating)	70% of VDD Min
	Disable (Low Voltage or GND)	30% of VDD Max

Current Consumption (消耗电流)

Power Dissipation Vcc=1.8~3.3V 15pF only				
Supply Voltage	1.000~40.000MHZ		41.000~54.000MHZ	
	7050/5032/3225	2520/2016/1612	7050/5032/3225/2520	2016/1612
1.8V	4mA Max	4mA Max	9mA Max	10mA Max
2.5V	4.5mA Max		10mA Max	
3.3V	5mA Max		12mA Max	

Please contact us for current consumption for frequencies above 54MHz

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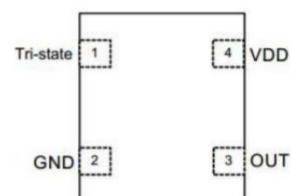


Pin Dimension (脚位尺寸)

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

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

Pin Assignments



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

Package Size – Dimensions (Unit: mm)	Recommended Land Pattern (Unit: mm)
1.6*1.2mm Top View Side View Bottom View	Recommended soldering Pattern
2.0*1.6mm Top View Side View Bottom View	Recommended soldering Pattern
2.5*2.0mm Top View Side View Bottom View	Recommended soldering Pattern

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3.2*2.5mm Top View Bottom View Side View	Recommended soldering Pattern
5.0*3.2mm Top View Bottom View Side View	Recommended soldering Pattern
7.0*5.0mm Top View Bottom View Side View	Recommended soldering Pattern
Notes: 1. A capacitor of value 0.01uf~0.1uf or higher between Vdd and GND is required.	

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Test Circuit (测试电路)

