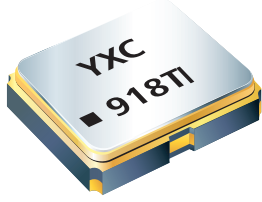




YSO221SR



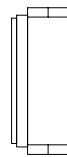
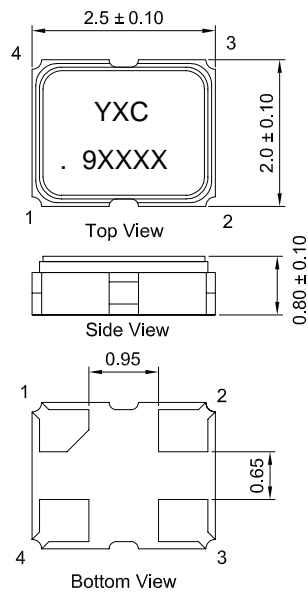
Features

- External dimensions: 2.5 x 2.0 x 0.8 mm.
- Frequency range: 1MHz ~ 160MHz.
- Ultra Small SMD seam sealed clock crystal oscillator units.
- Applications: WLAN, Bluetooth, DSC, DSL and other IT product.
- Tri-state function available.

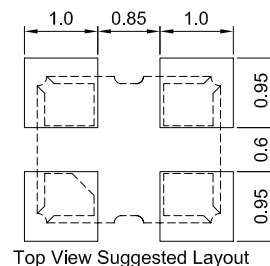
Electrical Specifications

Item / Type	YSO221SR	
Output Frequency Range	1.25 ~ 54 MHz	1 ~ 160MHz
Supply Voltage	0.8 ~ 1.6V or specify	1.6 ~ 3.6V or specify
Output Type	CMOS	
Oscillation Mode	Fundamental / 3rd Overtone	
Frequency Tolerance (at 25 °C)	± 20ppm, or specify	
Output Load	15 pF, or specify	
Operating Temperature Range	- 20 ~ + 70 °C :± 25ppm, -40 ~ +85 °C ± 50ppm, or specify	
Storage Temperature Range	- 55 ~ + 125 °C	
Voltage Vol (Max.) / Vol (Min.)	90%Vdd min./10%Vdd max	
Symmetry	45 ~ 55 % Standard	
Rise (Tr) / Fall (Tf) Time	4 ns Max.	
Start-up Time	3ms Max.	
Supply Current	See Below	
Frequency Aging (at 25 °C)	± 3 ppm / year Max.	
Phase Noise	-111dBc/Hz Typ. @KHz	-140dBc/Hz Typ. @KHz
	-129dBc/Hz Typ. @00KHz	
	-140dBc/Hz Typ. @floor Lv	

Dimensions



引脚	功能	定义
1	E/D	三态 / 无三态
2	GND	接地
3	OUTPUT	输出
4	Vdd	电源电压



Units: mm



YSO221SR



★ PART NUMBER GUIDE

e.g. O25201.25MEEA4SC

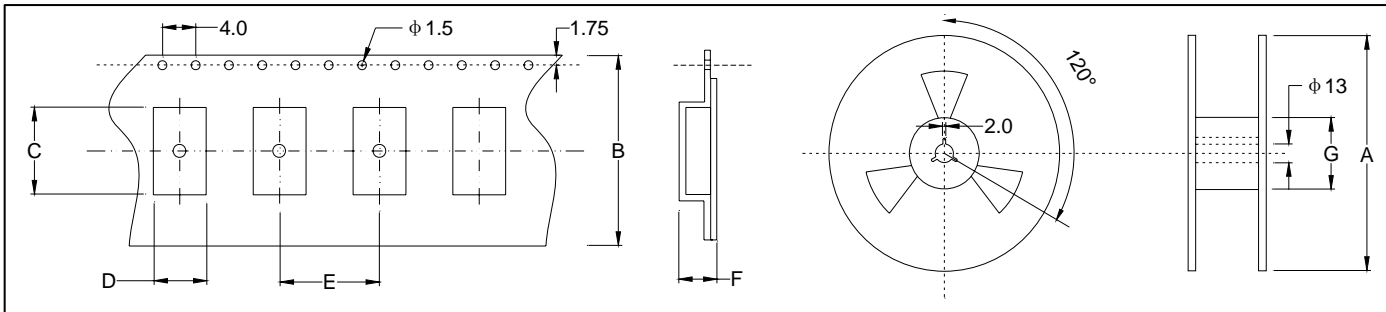
YSO221SR=2.5×2.0 SMD SEAM TYPE

Quartz Crystal Oscillator	Dimensions	Frequency (Hz)	Supply voltage (V)	Frequency Stability Overall (ppm)	output	Pin	Material	Operating Temp. Range
O	2520	1.25M	E	E	A	4	S	C

★ INPUT CURRENT

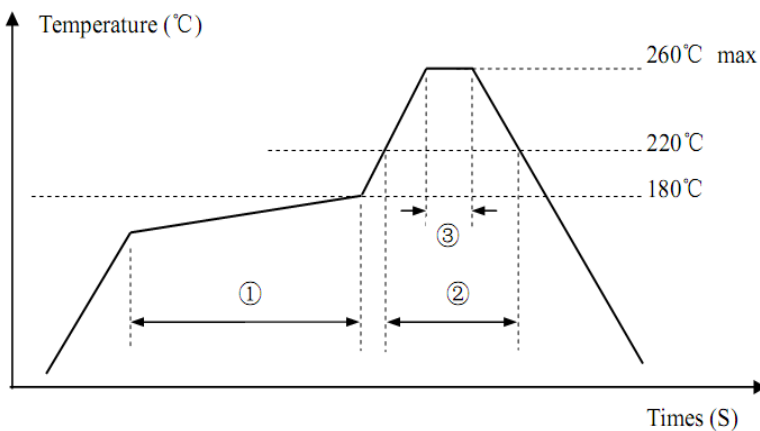
Vdd=0.8~1.6V		Vdc=1.8~3.6V	
No Load		No Load	
1.25 ~ 20.000 MHz	2.0 mA max	1.0 ~ 20.000 MHz	3.0mA max
20.0 ~ 40.000 MHz	3.0mA max	20.0 ~ 39.000 MHz	4.0mA max
40.0 ~ 54.000MHz	4.0mA max	40.0 ~ 75.000 MHz	10mA max
-		75.0 ~ 160.000 MHz	20mA max

★ TAPING SPECIFICATION (Unit: mm)



	A	B	C	D	E	F	G
OSC-SMD2520	180±2.0	12.1±0.3	2.80±0.15	2.30±0.15	3.85±0.1	1.18±0.1	61.5±1.0
3000 pcs per reel							

★ REFLOW SOLDERING PROFILE



Pb free reflow	①	Preheat	160~180°C	120sec. max
A	②	Primary heat	220°C	60sec. max
	③	Peak	260°C	10sec. max.

★ Test Circuit

