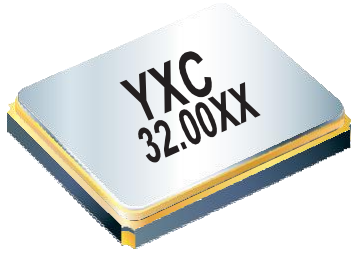


Features



- External dimensions: 2.55 x 2.05 x 0.55 mm.
- Frequency range: 12MHz ~ 48MHz.
- High precision and high frequency stability.
- Excellent heat resistance and environmental characteristics.
- Applications: Mobile phone, Bluetooth, W-LAN ISM, Band radio Clock for MPU GPS, smart phone, etc.

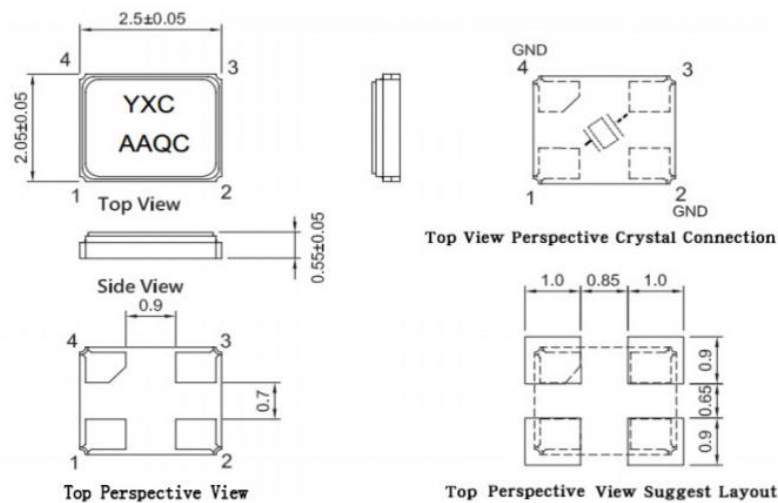
Electrical Specifications

Item / Type	X252032MMB4SI
Nominal Frequency	32 MHz
Vibrational Mode	AT Fundamental
Load Capacitance	10.0pF
Frequency Tolerance (at 25 °C)	± 10 ppm
Frequency Versus Temperature Characteristics	± 20 ppm
Operating Temperature	- 40 ~ + 85 °C
Storage Temperature	- 40 ~ + 105 °C
Shunt Capacitance	3 pF Max.
Level Of Drive	1~200 μW Max. (200 μW typical)
Frequency Aging (at 25 °C)	± 3 ppm / year Max.

Equivalent Series Resistance(ESR)

Fundamental	
12 ~ 13 MHz	150 Ω Max.
14 ~ 30 MHz	100 Ω Max.
30 ~ 48 MHz	60 Ω Max.

Dimensions



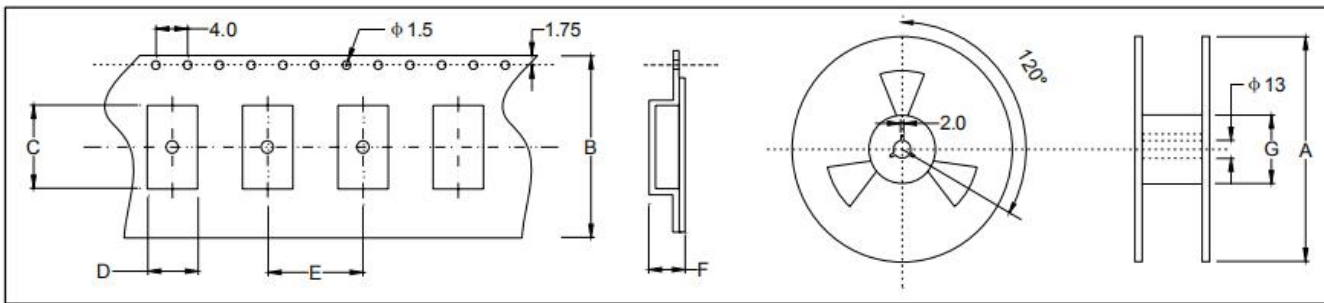
Units: mm

★ PARTNUMBER GUIDE 部件号示例 e.g. X252032MMB4SI

YSX221SL = 2.5 × 2.0 SMD SEAM TYPE

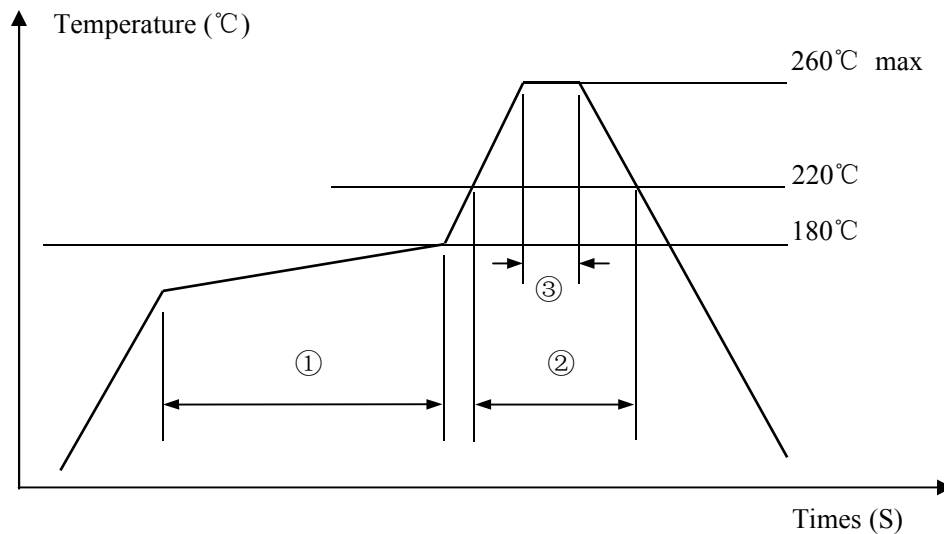
Quartz Crystal Resonator	Dimensions	Frequency (MHz)	Load Capacitance (Pf)	Frequency Stability Overall (ppm)	Pin	Material	Operating Temp. Range
Crystal Resonator	2.5* 2.0mm	32.00MHz	10pf	±10ppm	4 pin	Metal	-40~ +85 °C

★ TAPING SPECIFICATION (Unit: mm) 编带规格



	A	B	C	D	E	F	G
SMD2520	178 ± 2.0	8.0 ± 0.3	2.70 ± 0.05	2.25 ± 0.05	4.0 ± 0.1	1.05 ± 0.05	60.5 ± 1.0
3000 pcs per reel							

★ REFLOW SOLDERING PROFILE 回流焊特性



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