



ShaanXi DongXin HengKe Electronics Co., LTD

陕西东芯恒科电子有限公司

**SMD QUARTZ CRYSTAL RESONATOR**

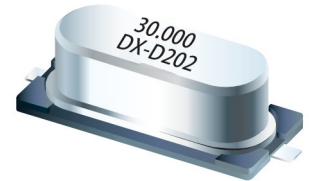
**SMD X'TAL 6.10 x 4.00 x2.0 mm**

**Applications**

- Digital Electronics
- Consumer Products
- Bluetooth
- Wireless LAN and Automotive

**Features**

- Dimensions:6.10 x 4.00 x2.0 mm
- Surface mount type crystal u
- A great number of standard frequencie



**Specifications**

Project	项目	SPECIFICATION 规格
Frequency Range	频率范围	8M~50MHz
Operation Mode	振动模式	Fundamental
Loading Capacitance	负载电容	12pF,20pF,or specify
Drive Level	激励电平	10μW (300μW Max)
Frequency Tolerance	频率偏差	±10ppm ~±20PPM (at 25°C)
Equivalent Resistance	谐振电阻	See Below
Frequency Stability	频率稳定性	±10ppm ~±50PPM
Operating Temp. Range	工作温度范围	-10~+60°C to -40~+85°C
Storage Temp. Range	储存温度范围	-55 ~ +125°C

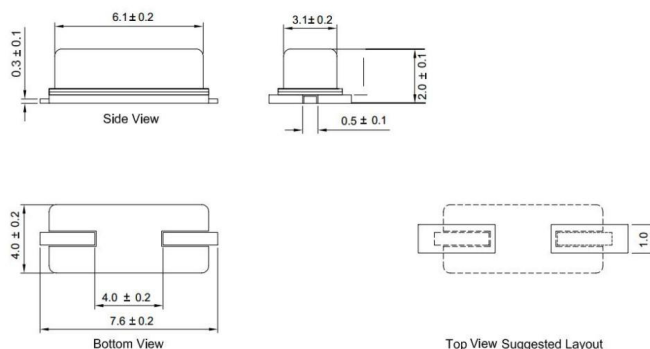
■ Table 1: Operating temperature range and frequency stability

Operation Temperature Range	Frequency Stability				
	±10PPM	±15PPM	±20PPM	±30PPM	±50PPM
-10°C~+60°C	●	●	●	●	●
-20°C~+70°C	●	●	●	●	●
-40°C~+85°C	○	○	●	●	●

■ Table 2: Equivalent series resistance

Frequency (MHz)	Overtone Order	ESR (Ω MAX)
8~11.999MHz	Fundamental	80Ω(MAX)
12~15.999MHz	Fundamental	50Ω(MAX)
16~19.999MHz	Fundamental	50Ω(MAX)
20~50MHz	Fundamental	40Ω(MAX)

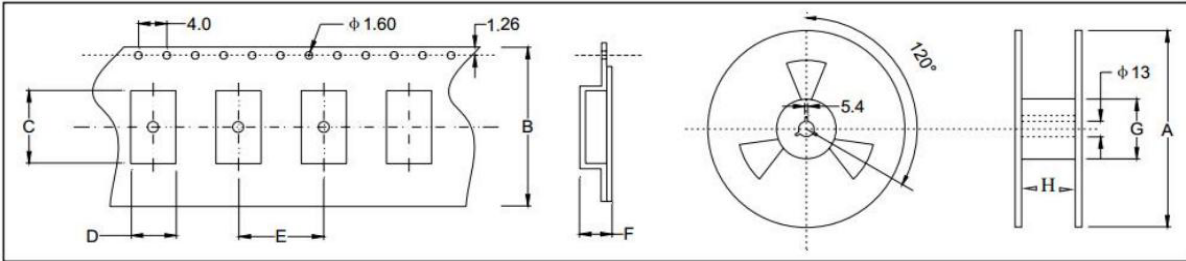
**Dimensions and Patterns [unit:mm]**



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**SMD X'TAL 6.10 x 4.00 x2.0 mm**

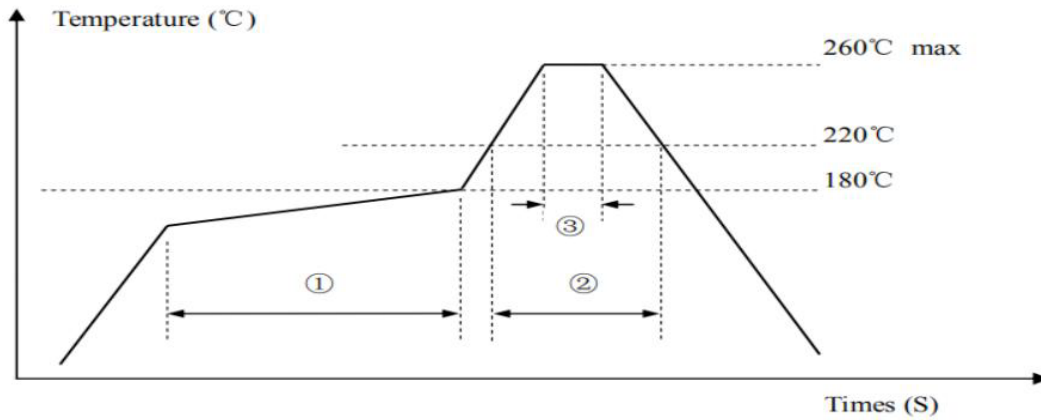
**Taping Specification(Unit: mm)**



Size	A	B	C	D	E	F	G	H
46SS/SMD	330±2.0	16.0±0.3	9.50±0.1	4.70±0.1	8.0±0.1	2.35±0.1	100.0±1.0	17.5±1.0

3000 pcs per reel

**REFLOW SOLDERING PROFILE**



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