



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 2.0×1.6×0.50mm**

**Applications**

- Smart Wearable
- Mobile Communications
- Bluetooth
- Wireless LAN and Automotive

**Features**

- Dimensions: 2.0 x 1.6 x 0.5 mm.
- Reflow soldering is available
- Extremely good for reducing EMI effect
- High precision and high frequency stability



**Specifications**

Project	项目	SPECIFICATION 规格
Frequency Range	频率范围	16M~100MHz
Operation Mode	振动模式	Fundamental
Loading Capacitance	负载电容	8 to 22pF , Series available
Drive Level	激励电平	10μW ( 100μW Max )
Frequency Tolerance	频率偏差	±10ppm ~±30PPM ( 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

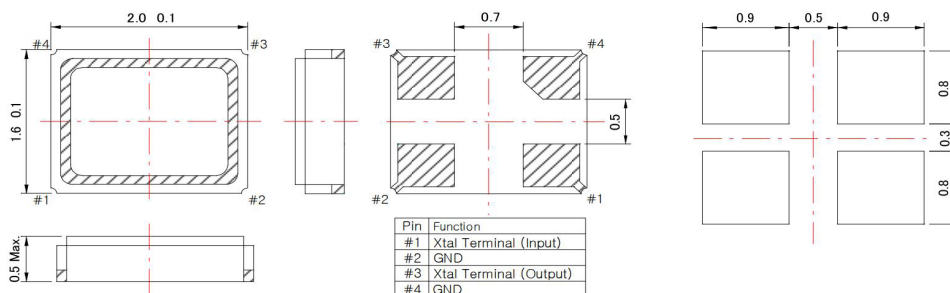
■ Table 1: Operating temperature range and frequency stability

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)
16~25.999MHz	Fundamental	100Ω(MAX)
26~31.999MHz	Fundamental	70Ω(MAX)
32~59.999MHz	Fundamental	60Ω(MAX)
40~100MHz	Fundamental	50Ω(MAX)

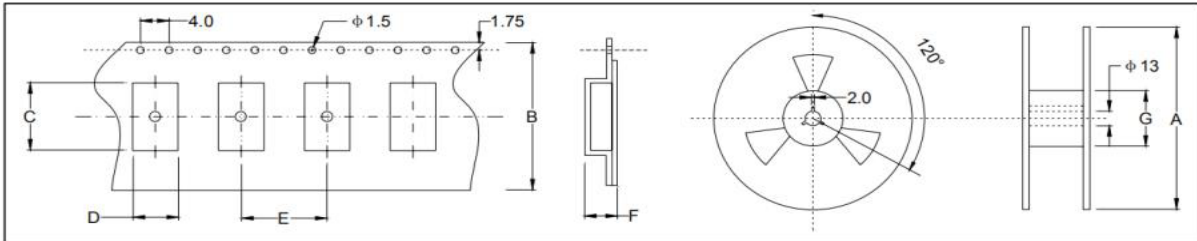
**Dimensions and Patterns [unit:mm]**



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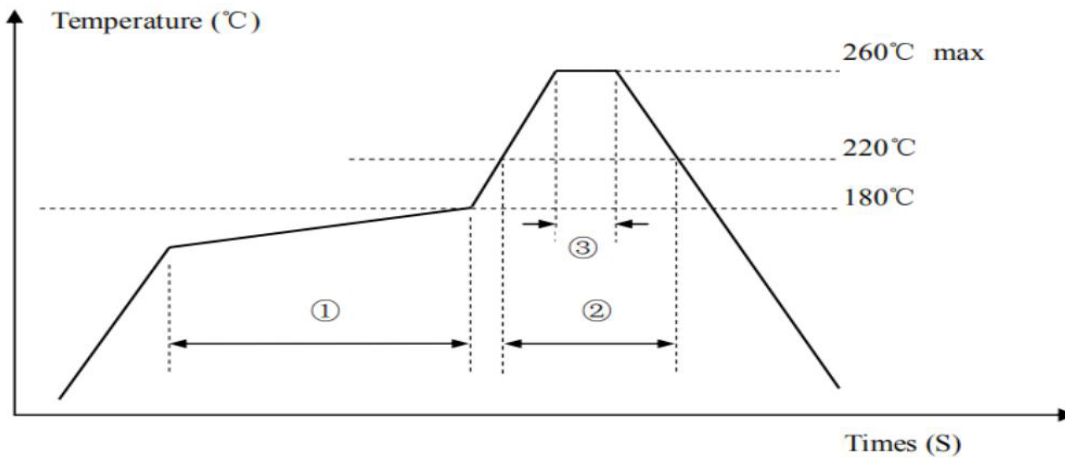
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**Taping Specification(Unit: mm)**



	A	B	C	D	E	F	G
SMD2016	178±2.0	8.0±0.3	2.25±0.05	1.85±0.05	4.0±0.1	0.65±0.05	60.5±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.