

**SMD QUARTZ CRYSTAL RESONATOR**

**SMD X'TAL 5.0×3.2×0.9mm**

**Applications**

Digital Electronics  
 Mobile Communications  
 Bluetooth  
 Wireless LAN and Automotive

**Features**

Dimensions:5.00 x 3.20 x 0.90 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	8M~54MHz
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 ( 300μW 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

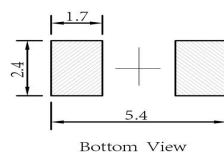
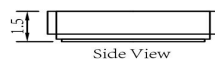
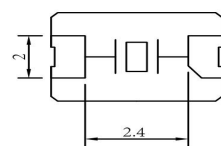
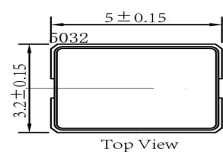
■ Table 1: Operating temperature range and frequency stability

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)
8 ~11MHz	Fundamental	100 Ω (MAX)
12~16MHz	Fundamental	50 Ω (MAX)
17~24MHz	Fundamental	40 Ω (MAX)
25~54MHz	Fundamental	30 Ω (MAX)

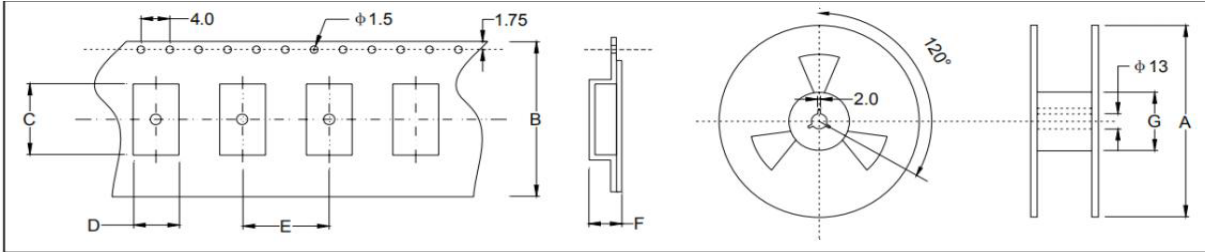
**Dimensions and Patterns [unit:mm]**



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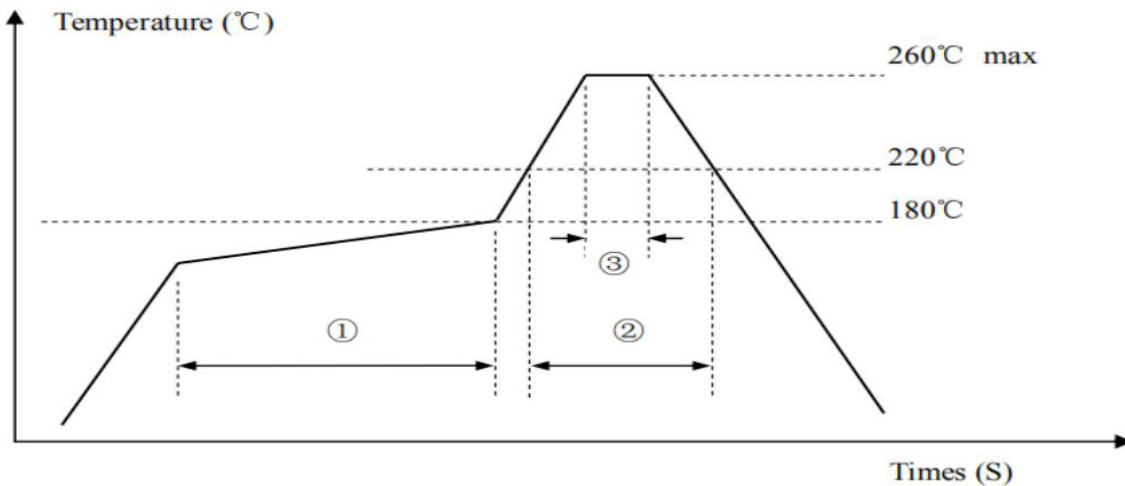
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**Taping Specification(Unit: mm)**



	A	B	C	D	E	F	G
SMD5032	178±2.0	12.0±0.3	5.40±0.10	3.60±0.10	8.0±0.1	1.1±0.1	60.5±1.0
1000 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.