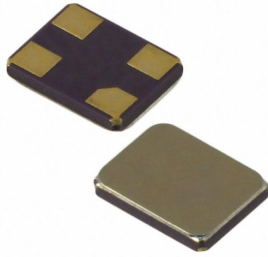


**SMD QUARTZ CRYSTAL RESONATOR**



**4 Pad Version 2.0×1.6 mm**

- ±10 ppm type available
- Excellent Reliability Performance
- EMI shielding possible by grounded lid
- Reflow soldering temperature: 260°C max
- Ceramic Seam Weld package



RoHS compliant

**★ PARAMETERS**

PARAMETERS	SPECIFICATION
Frequency Range	24~50MHz
Operation Mode	Fundamental
Loading Capacitance	9pF Std. 8 to 32pF / Series available
Drive Level	10 μ W ( 100 μ W Max )
Frequency Tolerance	±10ppm~±30ppm ( at 25°C )
Equivalent Resistance	80 Ω Max
Frequency Stability	±10ppm~±50ppm
Operating Temp. Range	-10~+60°C to -40~+85°C
Storage Temp. Range	-55~+125°C

○ All specification subject change without notice.

**★ FREQUENCY STABILITY VS. TEMPERATURE**

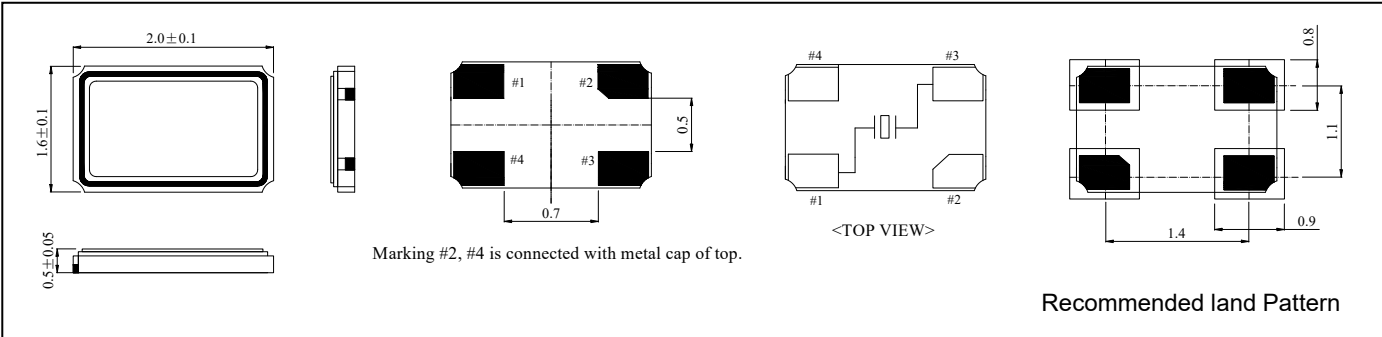
Operation Temperature Range	Frequency Stability				
	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm
-10°C~+60°C	●	○	○	○	○
-20°C~+70°C	○	○	●	○	○
-40°C~+85°C		○	○	●	○

● standard ○ available

**★ ESR (SERIES RESISTANCE RS)**

Frequency	Vibration Mode	ESR
24-25.999MHz	AT CUT/FUND.	80Ω(MAX)
26-39.999MHz	AT CUT/FUND.	60Ω(MAX)
40-50.999MHz	AT CUT/FUND.	50Ω(MAX)

**★ DIMENSIONS& LAND PATTERN LAYOUT (Unit: mm)**

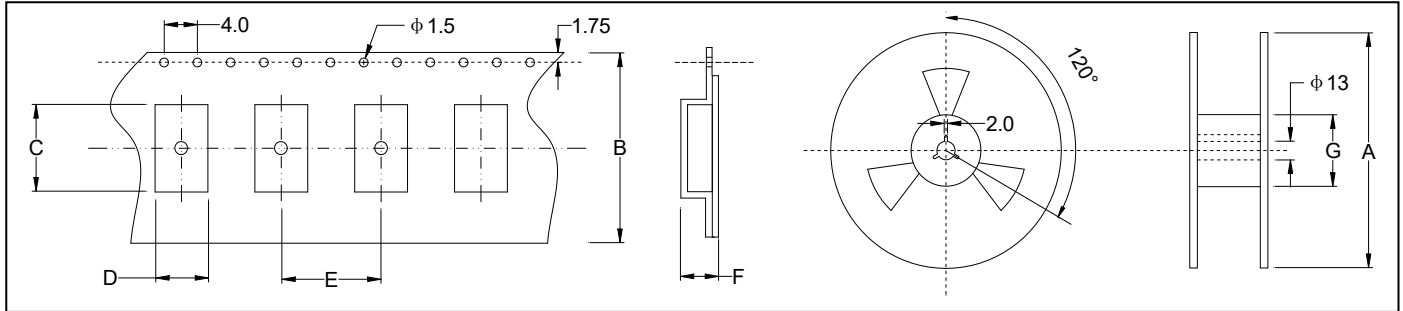


**★ PART NUMBER GUIDE** e.g. FTX16.000M10SM2A-10/10B (\*SM2A=2.0×1.6 SMD SEAM TYPE)

Logo	Quartz Crystal Resonator	Frequency Hz	Load Capacitance pF	Package	Frequency Tolerance ppm	Frequency Stability ppm	Operating Temp. Range
FT	X	16.000M	10	SM2A	10	10	B

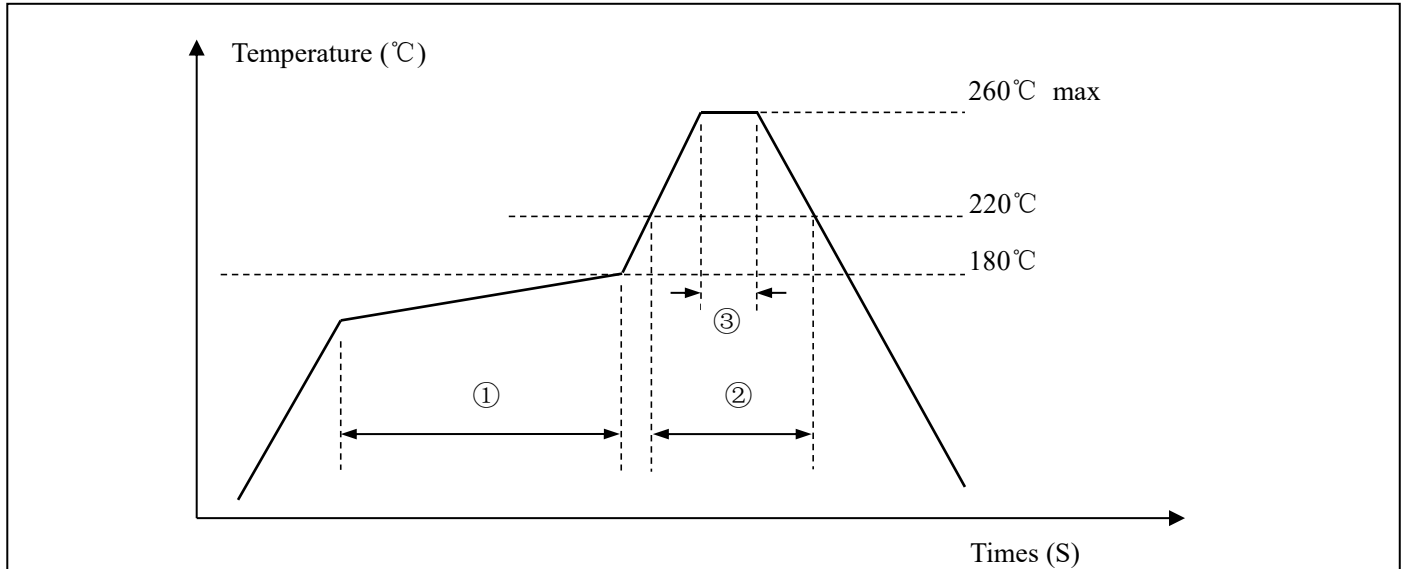
Definition	Description
Operating Temperature Range	A: -10~+60°C
	B: -20~+70°C
	C: -30~+80°C
	D: -40~+85°C
	E: Customer specified

★ 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.