

SMD QUARTZ CRYSTAL RESONATOR

2 Pad Version 2.0×1.2 mm



- Ultra miniature SMD tuning fork crystal resonator
- 32.768 KHz standard
- ±20 ppm Standard
- Excellent Reliability Performance
- Reflow soldering temperature: 260℃ max

RoHS
2002/95/

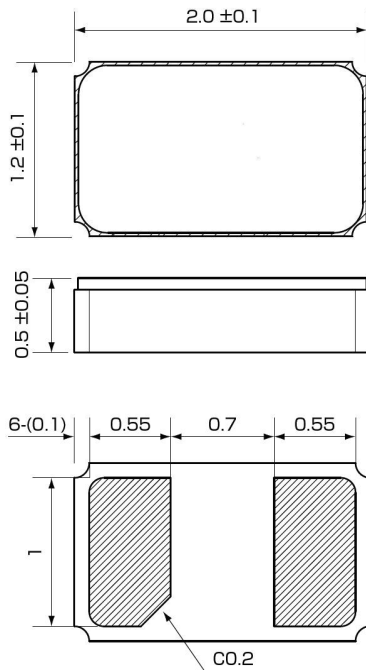
RoHS compliant

★ PARAMETERS

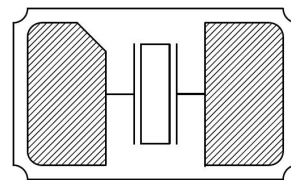
PARAMETERS	SPECIFICATION
Frequency Range	32.768KHz
Loading Capacitance	12.5pF Std. 9 pF available
Drive Level	0.2μW (1.0μW Max)
Frequency Tolerance	±20ppm (at 25℃)
Equivalent Resistance	80KΩ Max
Turn-over temperature	+25℃±5℃
Temperature coefficient	-0.04×10 ⁻⁶ /℃ ² max
Operating Temp. Range:	-40~+85℃
Storage Temp. Range:	-40~+85℃
Aging (25℃, First Year)	±3ppm max

○ All specification subject change without notice.

★ DIMENSIONS& LAND PATTERN LAYOUT (Unit: mm)

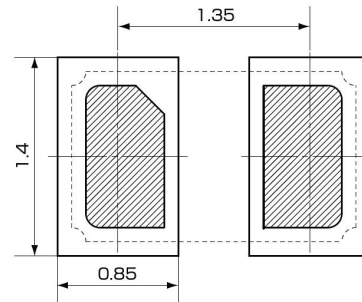


〈Top View〉



■ Recommended Land Pattern [mm]

〈Top View〉

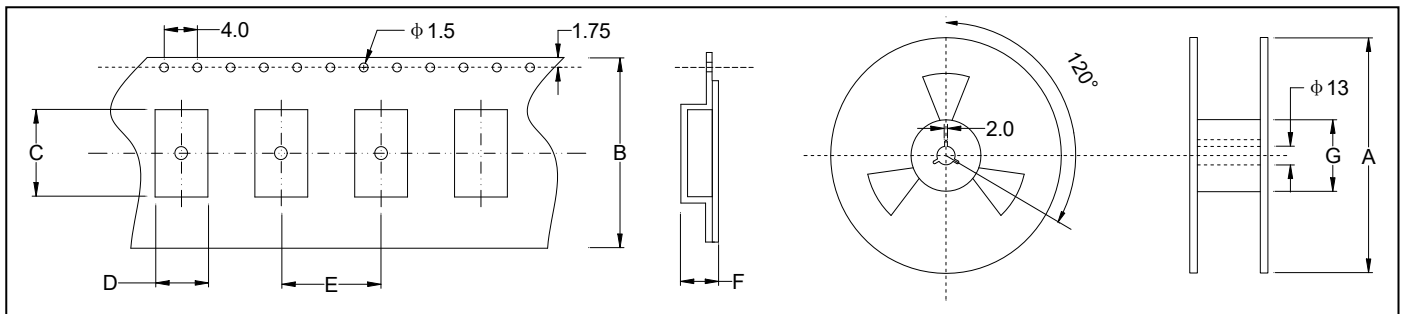


★ PART NUMBER GUIDE e.g. FTX32.768K12.5SM2-20D (*SM2=2.0×1.2 SMD)

	Quartz Crystal Resonator	Frequency Hz	Load Capacitance pF	Package	Frequency Tolerance ppm	Operating Temp. Range
FT	X	32.768KHz	12.5	SM2	20	D

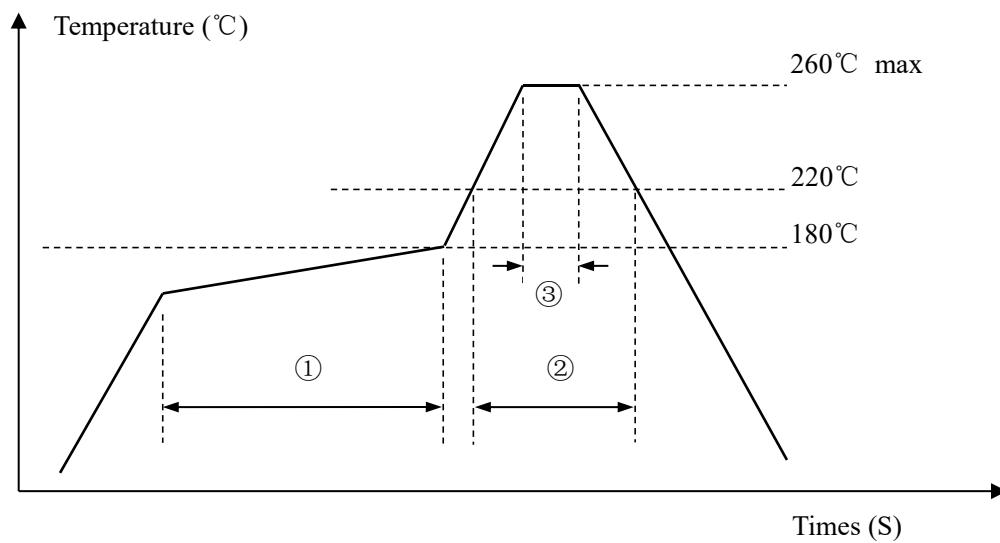
Definition	Description
Operating Temperature Range	A: -10~+60℃
	B: -20~+70℃
	C: -30~+80℃
	D: -40~+85℃
	E: Customer specified

★ TAPING SPECIFICATION (Unit: mm)



	A	B	C	D	E	F	G
SMD2.0×1.2	180	8.0	2.3	1.45	4.0	0.65	60
3000 pcs per reel							

★ REFLOW SOLDERING PROFILE



Pb free reflow A	①	Preheat	160~180℃	100sec. max
	②	Primary heat	220℃	35sec. max
	③	Peak	260℃	10sec. max