

## SMD QUARTZ CRYSTAL RESONATOR

### 4 Pad Version 12.5×4.6 mm



- Plastic Encapsulated
- ±10 ppm available
- Temperatures to -40°C ~ +85°C
- Reflow soldering temperature: 260°C max
- Tape and Reel (1,000 pcs STD)



RoHS compliant

### ★ PARAMETERS

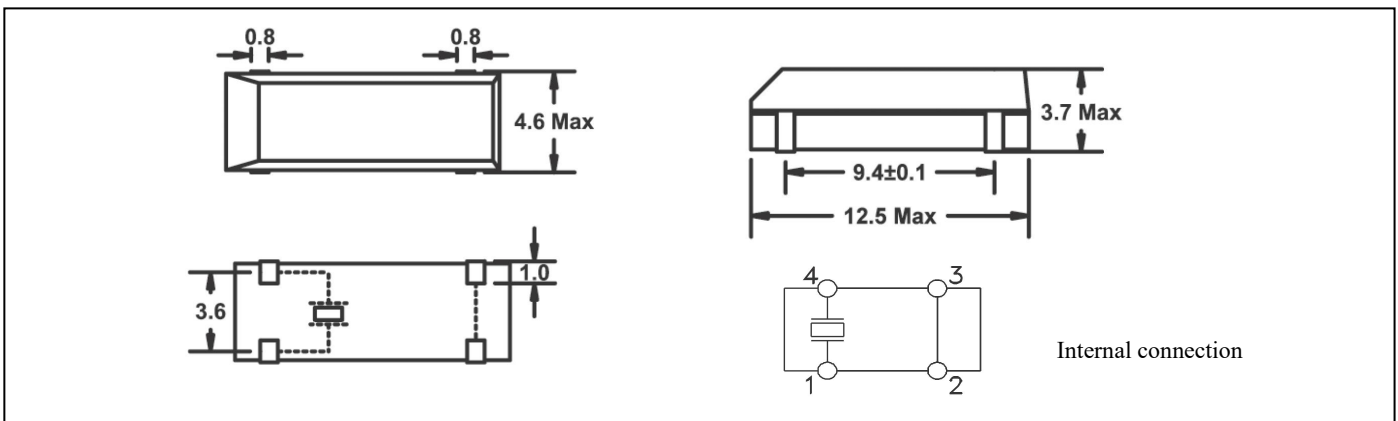
PARAMETERS	SPECIFICATION
Frequency Range	3.579~27.000MHz
Loading Capacitance	20pF Std. 8 to 33pF Series available
Drive Level	100 μ W Max
Frequency Tolerance	±10ppm ~ ±50ppm (at 25°C)
Frequency Stability	±20ppm ~ ±50ppm
Equivalent Resistance	50 Ω ~ 200 Ω
Operating Temp. Range:	-10 ~ +60°C to -40 ~ +85°C
Storage Temp. Range:	-55 ~ +125°C
Aging (25°C, First Year)	±5ppm max

⊙ All specification subject change without notice.

### ★ ESR (SERIES RESISTANCE RS)

Frequency (MHz)	3.579 ≤ f < 4.000	4.000 ≤ f < 6.000	6.000 ≤ f < 10.000	10.000 ≤ f < 27.000
Equivalent Resistance (MHz)	200Ω (MAX)	150Ω (MAX)	100Ω (MAX)	50Ω (MAX)

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

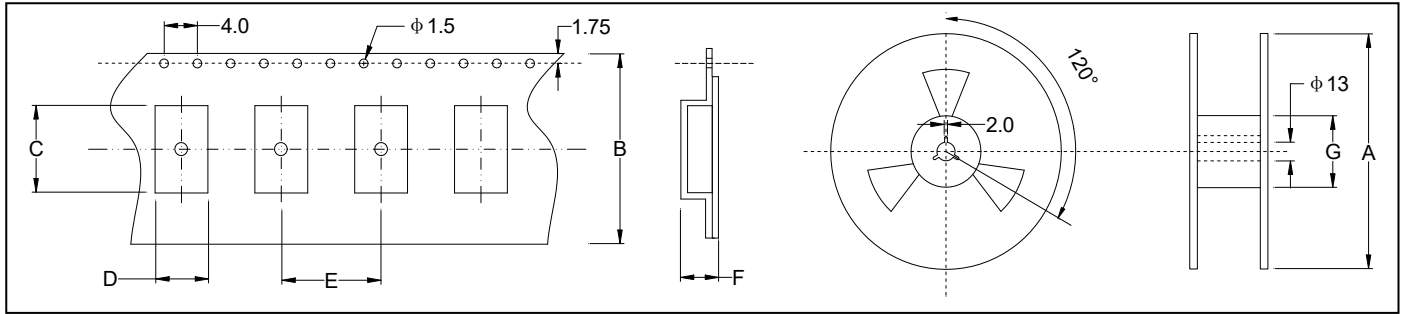


### ★ PART NUMBER GUIDE e.g. FTX16.000M20SM12-30/50D (\*S=HC49/S TYPE)

Logo	Quartz Crystal Resonator	Frequency Hz	Load Capacitance pF	Package	Frequency Tolerance ppm	Frequency Stability ppm	Operating Temp. Range
FT	X	16.000M	20	SM12	30	50	D

Definition	Description	
Operating Temperature Range	<b>A:</b> -10~+60°C	<b>B:</b> -20~+70°C
	<b>C:</b> -30~+80°C	<b>D:</b> -40~+85°C
	<b>E:</b> -30~+105°C	<b>F:</b> -40~+105°C
	<b>G:</b> -40~+125°C	<b>S:</b> Customer specified

★ TAPING SPECIFICATION (Unit: mm)



	A	B	C	D	E	F	G
SMD12.5x4.6	330	24.0±0.3	12.8	5.8	12.0	4.3	100
1000 pcs per reel							

★ REFLOW SOLDERING PROFILE

