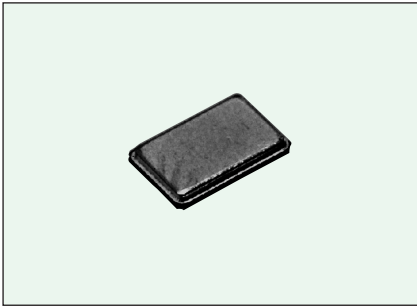


Crystal Unit



TN4-25702(TSX-8A type)

Ceramic Seam Weld

Features

- Ultra miniature size low profile unit (5.0 X 3.2 X 0.8 mm max.)
- Excellent shock-proof characteristics (10,000 G min.)
- High reliable LCC package
- Available Surface Mount Technology and IR-reflow process

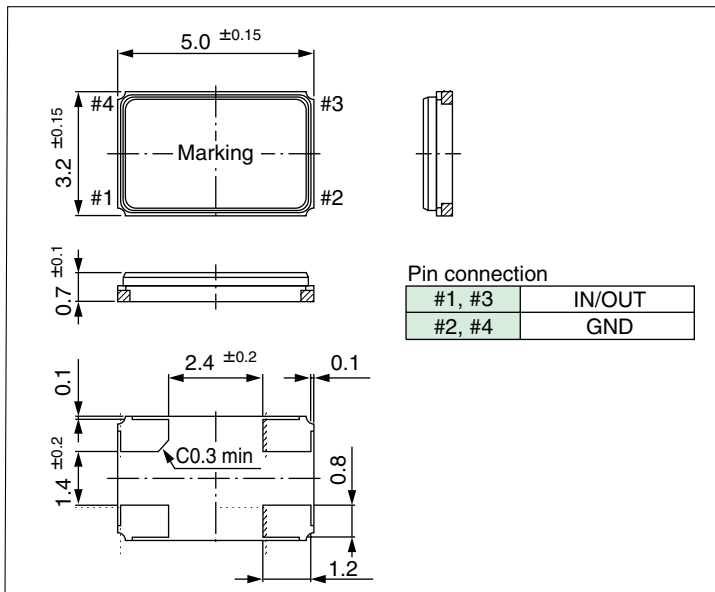
Application

- Bluetooth

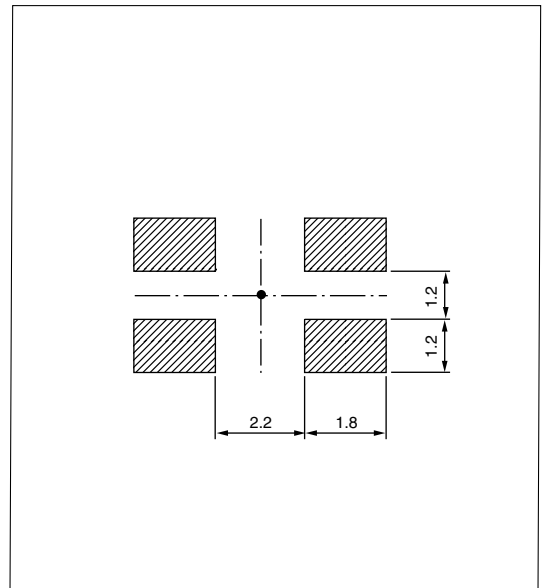
Specifications

Type	TN4-25702
Nominal frequency	16.000000 MHz
Mode of vibration	Fundamental
Operating temperature range	-20°C to +75°C
Frequency tolerance	±10 ppm (at +25°C ±2°C)
Frequency stability	±9 ppm (-20°C to +75°C, Ref. 25°C)
Load capacitance (CL)	9.0 pF
Shunt capacitance	1.6 pF typ.
Series resistance	35 ohms max
Drive level	100 μW max.
Pulling sensitivity	20 ppm/pF min (at 9.0 ±1.0 pF)
Aging	±1.0 ppm max. / year

Package Outline [Dimensions in mm]



Foot Pattern [Dimensions in mm]



TSX-Series for Bluetooth

Type	Dimension	Freq.	Sample	Mass-production	Load Capacitance	Electrical Specifications		
						Rr	Freq. Tolerance	Freq. Stability
TSX-8A	5x3.2x0.7	12~20	Available	Available	8~20pF	< 35 ohm	±10ppm	±9ppm/-20 to 75degC
		20~32	Available	Available	8~20pF	< 35 ohm		
TSX-10	4x2.5x0.7	13,16	Available	2001.6~	8~20pF	< 70 ohm		
		26	Available	2001.6~	8~20pF	< 40 ohm		
		others	2001.3~	2001.9~	8~20pF	< 70,40 ohm		
TSX-11	3.2x2.5x0.65	26	2001.4~	2001.10~	8~20pF	< 80 ohm		
		32	2001.4~	2001.10~	8~20pF	< 60 ohm		

