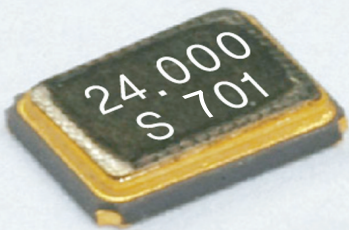


CRYSTAL UNIT

CERAMIC SMD TYPE
SX-32

- Four pad ceramic surface mount package
- AT cut
- Tight tolerance/stability
- Using highly reliable seam weld method
- Taping and reel available, automatic mountable
- Pb-free and RoHS compliance



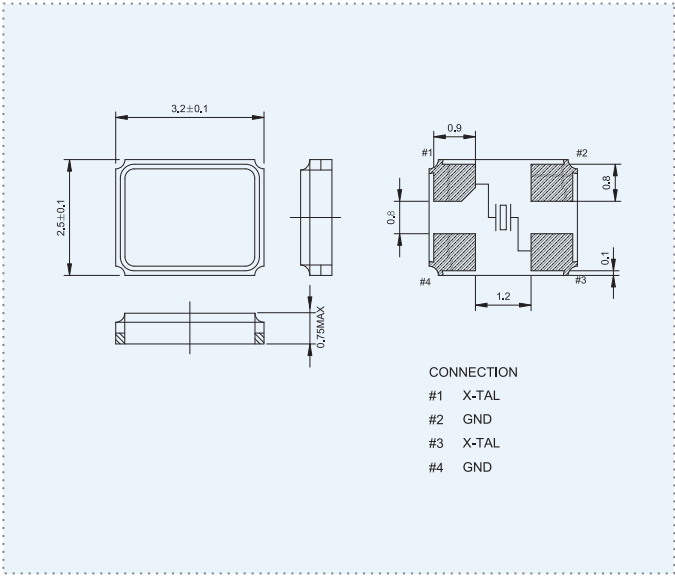
ELECTRICAL SPECIFICATIONS

Frequency Range	12.000 to 50.000MHz
Operating Temperature Range	-10 to +60℃(STD), -20 to +70℃, -40 to 85℃, or specify
Storage Temperature Range	-40 to +85℃
Frequency Tolerance (at 25℃)	± 15, ± 30, ± 50ppm(STD), or specify
Frequency stability Over Operating Temperature Range	See Table1 in page 4
Load Capacitance(CL)	12pF(STD), Custom CL≥8pF or Series Resonant
Drive Level	10μW(100μW max.)
Shunt Capacitance(Co)	5.0pF max.
Aging (at 25℃)	± 3.0ppm/year max.
Insulation Resistance	500MΩ min. at 100V _{DC}

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency Range(MHz)	ESR(Ω MAX.)	Mode of Oscillation
12.000 ~ 13.999	150	Fundamental
14.000 ~ 15.999	100	Fundamental
16.000 ~ 19.999	80	Fundamental
20.000 ~ 29.999	60	Fundamental
30.000 ~ 50.000	50	Fundamental

MECHANICAL DIMENSIONS (mm)



LAND PATTERN (mm)

