

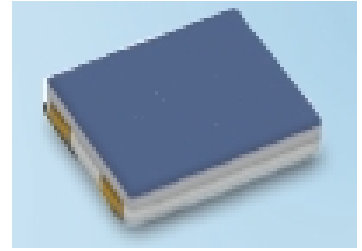
## Series TD3

### ALL CERAMIC QUARTZ CRYSTAL RESONATOR SMD



#### FEATURE

- All ceramic epoxy sealed SMD package
- Ultra-light weight and ultra-miniature size
- Wide frequency range
- Low cost option to consumer grade products



#### ELECTRICAL SPECIFICATIONS

Frequency Range	12MHz to 48MHz (Fundamental)
Frequency Tolerance (at 25°C±3°C)	±20ppm,±30ppm , ±50ppm
Frequency Tolerance Over Operating Temperature with refer to 25°C	±20ppm,±30ppm , ±50ppm
Operating Temperature Range	-20 °C to +70 °C -40 °C to +85 °C
Storage Temperature Range	-55 °C to + 125 °C
Shunt Capacitance (C <sub>0</sub> )	5.0 pF Max
Driver Level (Typical)	0.1mW(0.5mW Max.)
Load Capacitance(C <sub>L</sub> )	10pF or specify
Aging	±5ppm/year
Insulation Resistance	500MΩ Min.

#### EQUIVALENT SERIES RESISTANCE ( ESR) (Table 1)

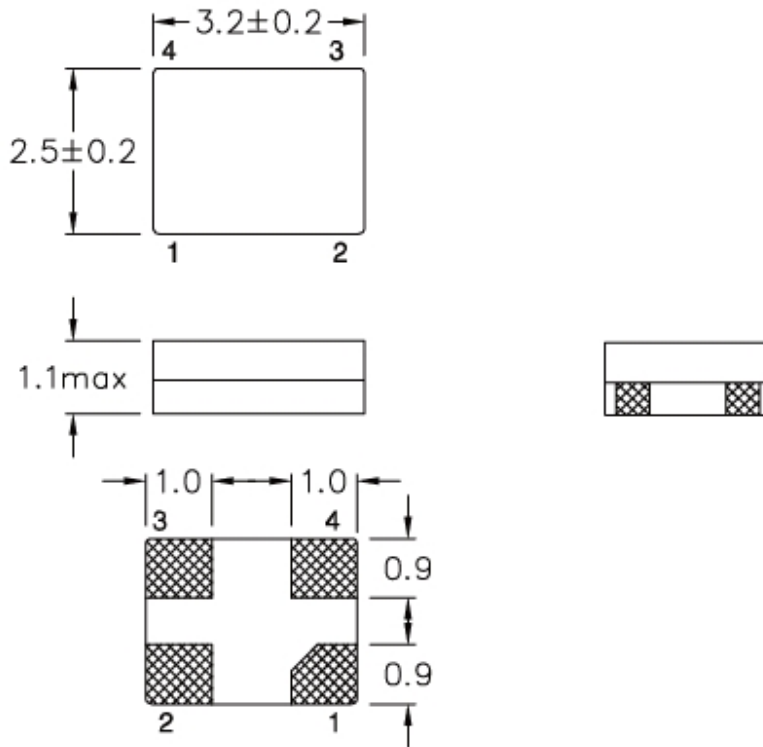
Frequency Range	12 ∠ f <sub>0</sub> ≤ 16	16 ∠ f <sub>0</sub> ≤ 25	25 ∠ f <sub>0</sub> ≤ 30	30 ∠ f <sub>0</sub> ≤ 48
E.S.R(Ω)	120Ω Max	60Ω Max	50Ω Max	35Ω Max

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## Dimension



## SOLDERING PATTERN(mm)

