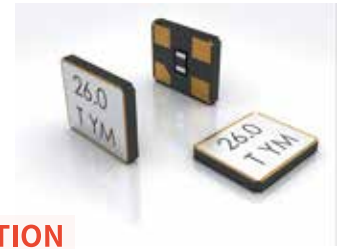


Thermistor Quartz Crystal

3.1 T2520

Thermistor Quartz Crystals T2520 Series



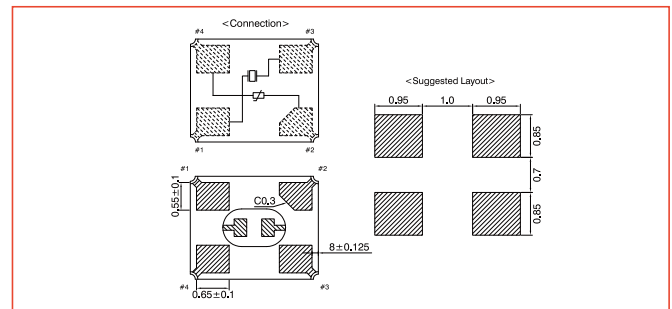
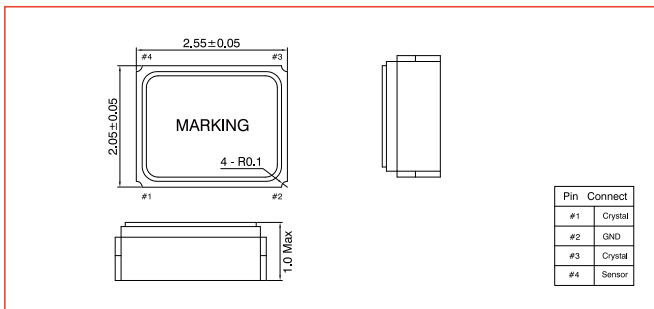
FEATURES

- Low aging
- Excellent shock and vibration performance
- Thermally coupled temperature sensor

TYPICAL APPLICATION

- The best choice of Automotive, Communications GPS, Wifi and Mobile phones

DIMENSIONS



ELECTRICAL SPECIFICATION

Item/Type	T2520
Frequency Range	19.2MHz, 26MHz
Frequency Tolerance (at 25°C)	±10ppm, or specify
Frequency Stability Over Operating Temperature Range	±12ppm, or specify
Operating Temperature Range	-30 ~ +85°C, or specify
Shunt Capacitance (C ₀)	3pF Max.
Load Capacitance	7pF, or specify
Drive Level	100μW (typical)
Aging(at 25°C)	±1 ppm/year Max.
Storage Temperature Range	-40 ~ +85°C

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency	Resistance
19.2MHz , 26MHz	50Ω Max.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	±12
-30 ~ +85		○

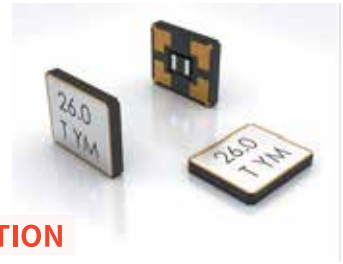
*o: Available Δ: Condition X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.

Thermistor Quartz Crystal

3.2 T2016

Thermistor Quartz Crystals T2016 Series



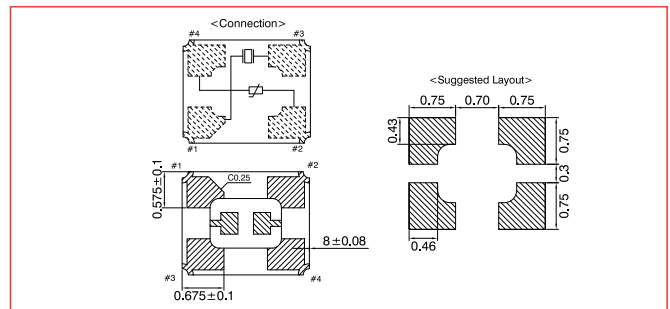
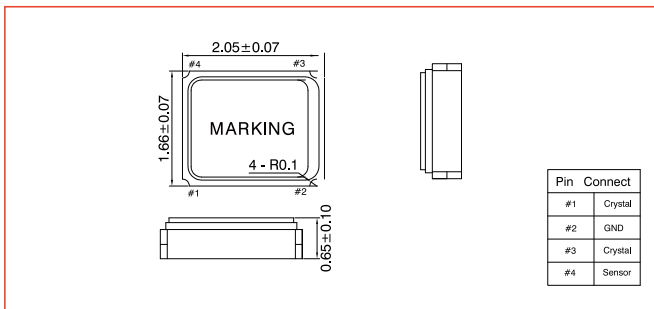
FEATURES

- Low aging
- Excellent shock and vibration performance
- Thermally coupled temperature sensor

TYPICAL APPLICATION

- The best choice of Automotive, Communications GPS, Wifi and Mobile phones

DIMENSIONS



ELECTRICAL SPECIFICATION

Item/Type	T2016
Frequency Range	19.2MHz, 26MHz, 38.4MHz
Frequency Tolerance (at 25°C)	±10ppm, or specify
Frequency Stability Over Operating Temperature Range	±12ppm, or specify
Operating Temperature Range	-30 ~ +85°C, or specify
Shunt Capacitance (C ₀)	3pF Max.
Load Capacitance	7pF, or specify
Drive Level	100μW (typical)
Aging(at 25°C)	±1 ppm/year Max.
Storage Temperature Range	-40 ~ +85°C

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency	Resistance
19.2MHz, 26MHz, 38.4MHz	80Ω Max.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	±12
-30 ~ +85		○

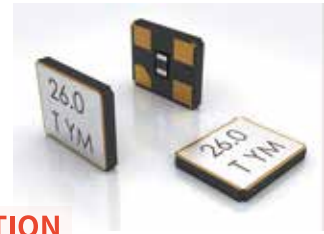
*○: Available Δ: Condition X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.

Thermistor Quartz Crystal

3.3 T1612

Thermistor quartz crystal T1612 series



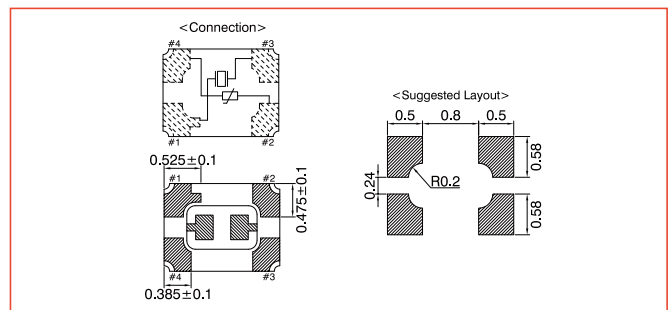
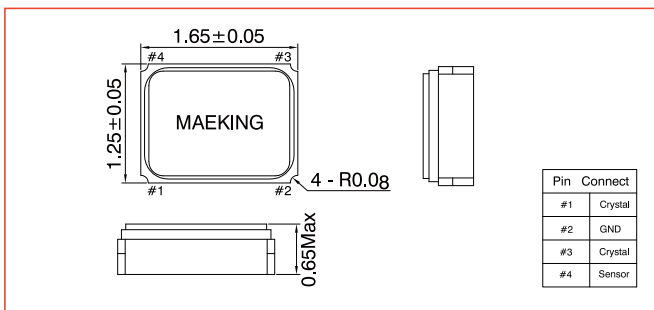
FEATURES

- Ultra-small size: 1.6 × 1.2 × 0.65 mm
- Ceramic seam welding package
- High stability and low aging
- Pb Free and RoHS compliant

TYPICAL APPLICATION

- Small wireless device, Wireless module, IoT, Wearable device, TWS
- Health care equipment, Small consumer equipment etc

DIMENSIONS



ELECTRICAL SPECIFICATION

Item/Type	T1612
Frequency Range	26 ~ 76.8MHz
Frequency Tolerance (at 25°C)	±10ppm, or specify
Frequency stability over Operating Temperature	±12ppm, or specify
Operating Temperature Range	-30 ~ +85°C
Shunt Capacitance (C ₀)	3pF Max.
Drive Level	10μW (100μW Max.)
Load Capacitance	7pF, or specify
Aging(at 25°C)	±1 ppm/year Max.
Storage Temperature Range	-40 ~ +85°C

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency	Resistance
26MHz ≤ f _{nom} < 40MHz	80Ω Max.
40MHz ≤ f _{nom} ≤ 52MHz	60Ω Max.
52MHz < f _{nom} ≤ 76.8MHz	40Ω Max.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C)	ppm	±12
-30 ~ +85		○

*o: Available Δ: Condition X: Not available

Note: not all combination of options are available. Other specifications may be available upon request.