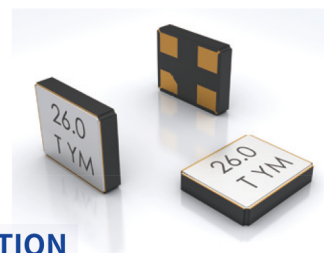


2.3 M2016

Metal Can Type Crystals M2016 Series



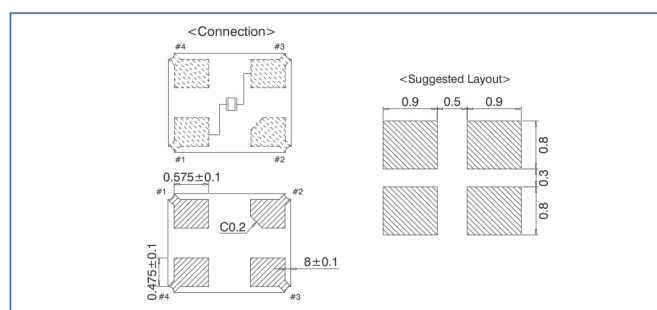
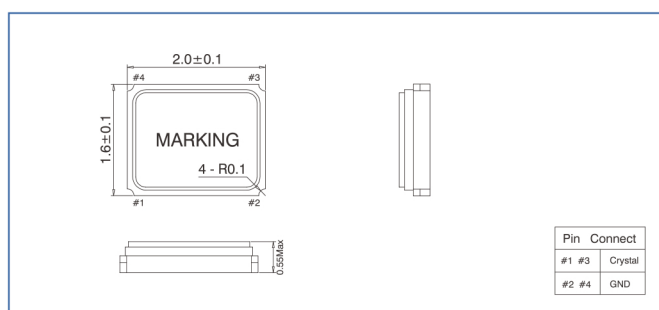
FEATURES

- Reflow resistance type crystal units
- Higher frequency pullability and lower equivalent series resistance
- Lower cost and highly mass production capability
- RoHS Compliant/Pb Free

TYPICAL APPLICATION

- The best choice of Notebook Computer
TV, STB, LCDM and Cable Modem

DIMENSIONS



ELECTRICAL SPECIFICATION

Item/Type	M2016
Frequency Range	16 ~ 54 MHz
Frequency Tolerance (at 25°C)	±10 ppm, or specify
Frequency Stability Over Operating Temperature Range	±10 ppm, or specify
Operating Temperature Range	-10 ~ +60°C, or specify
Shunt Capacitance (C ₀)	3pF Max.
Drive Level	10μW (100μW Max.)
Load Capacitance	Series, 6pF, 12pF, 16pF, or specify
Aging (at 25°C)	±3 ppm/year Max.
Storage Temperature Range	-40 ~ +125°C

EQUIVALENT SERIES RESISTANCE(ESR)

Frequency	Resistance
$16\text{MHz} \leq F_o < 20\text{MHz}$	150 Ω Max.
$20\text{MHz} \leq F_o < 30\text{MHz}$	100 Ω Max.
$30\text{MHz} \leq F_o < 60\text{MHz}$	80 Ω Max.
$60\text{MHz} \leq F_o < 96\text{MHz}$	60 Ω Max.

FREQ. STABILITY vs. TEMP. RANGE

Temp.(°C) \ ppm	±5	±10	±15
-10 ~ +60	△	○	○
-20 ~ +70	×	△	○
-40 ~ +85	×	×	△

Temp.(°C) \ ppm	±15	±20	±30	±50
-40 ~ +105	△	○	○	○
-40 ~ +125	×	×	×	○

*o: Available Δ: Condition X: Not available

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