

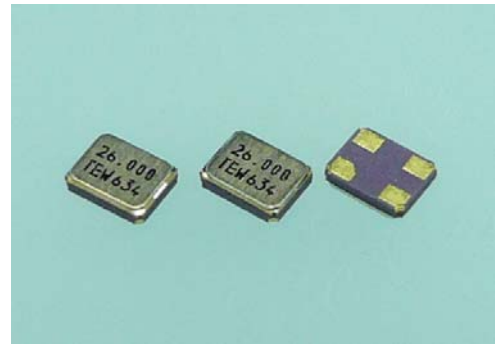
Package : TAS-2016B

Ultra Miniature Surface Mount Crystal

■Feature

- Ultra-small footprint ,low profile(2.0×1.6,0.45±0.05)
- Hermetically sealed - [Gold-Tin(Au-Sn) methodology]
- High Reflow Temperature Tolerant.
- RoHS compliant - Lead Free

■Applications NFC, Bluetooth, WLAN and Zigbee



■Standard Specifications

Characteristic	Value
Size (mm)	2.0×1.6, 0.45±0.05t
Overtone Order	Fundamental
Frequency Range (MHz)	18 to 60 (See Table 1)
Equivalent Series Resistance (Ω)	50max. to 250 max.
Drive Level (μWatts)	10, 30
Operating Temperature Range	See Table 2
Frequency Temperature Characteristics (in reference to 25 °C)	See Table 2

■Table 1 Typical Frequencies

Frequency (MHz) - ESR	
18.000[ESR=250 Ω max]	20.000[ESR=150 Ω max]
24.000[ESR=120 Ω max]	26.000[ESR=80 Ω max]
27.000[ESR=80 Ω max]	30.000[ESR=80 Ω max]
30.400[ESR=60 Ω max]	32.000[ESR=60 Ω max]
35.400[ESR=60 Ω max]	36.000[ESR=60 Ω max]
38.400[ESR=60 Ω max]	40.000[ESR=60 Ω max]
44.000[ESR=60 Ω max]	48.000[ESR=50 Ω max]

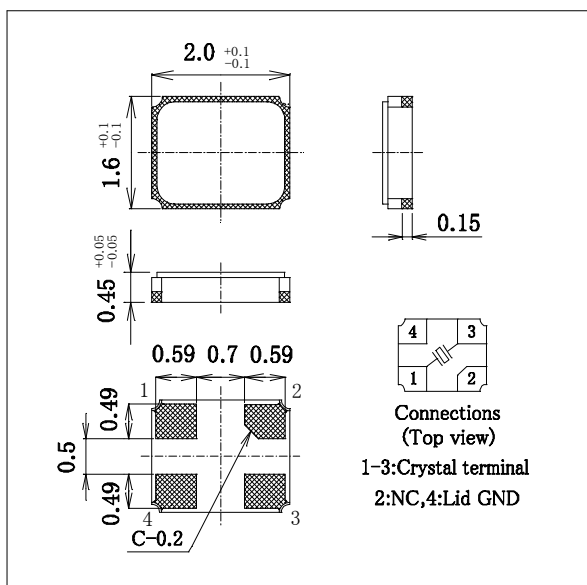
■Table 2 Frequency Temperature vs. Characteristics

Temperature Range	Stability(ppm)	Frequency Tolerance(ppm@25°C)
-10 to +60 °C	±5 max.	±20 max. (25 °C ± 3°C)
-20 to +70 °C	±10 max.	
-30 to +85 °C	±15 max.	

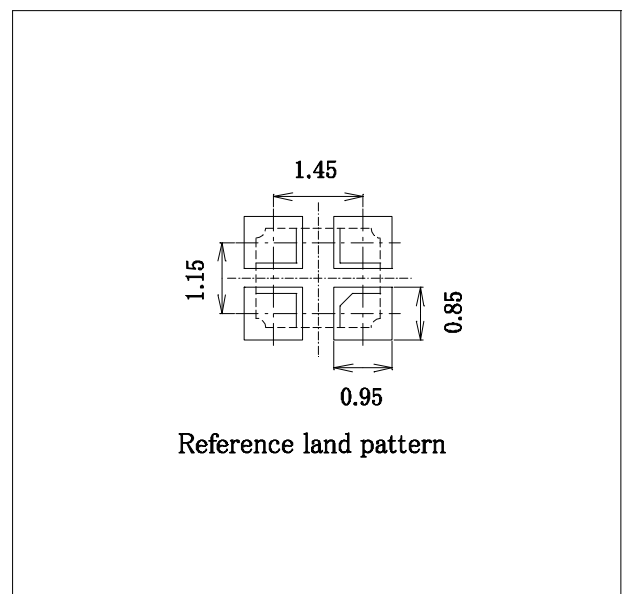
Note :

Modified specifications are available upon request for specific applications.

■Outline Dimensions



■Reference Land Patterns



The ordering number will be obtained separately by customer's requirement.