



2.0x1.6mm for Mobile Communications



Features

- Crystal Unit with Thermistor
- Height 0.65 (max.) mm is also available
- Reference frequency for telecommunication systems
- Reflow compatible
- Using ceramic package resulting in high reliability

Applications

- Mobile Communications, GNSS

How to Order

CT2016DB 19200 □□ □ □ □ □  
① ② ③ ④ ⑤ ⑥ ⑦

①Series

②Frequency

③Load Capacitance

④Frequency Tolerance

B0	6 pF	—	F	$\pm 10 \times 10^{-6}$	Std.
C0	7 pF	Std.	G	$\pm 15 \times 10^{-6}$	—

⑤Operating Temp. Range ⑥Frequency Temp. Stability

PF	-40 to +85°C	$\pm 10 \times 10^{-6}$ (at -25 to +85°C)
RH	-40 to +105°C	$\pm 12 \times 10^{-6}$ (at -30 to +85°C)

⑦Individual Specification

Packaging (Tape & Reel 12000 pcs./ reel)

Specifications

Item	Symbol	Specification	Unit	Remarks
Frequency Range	f <sub>nom</sub>	19200 / 38400	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	7	pF	
Frequency Tolerance	f <sub>tol</sub>	$\pm 10$	$\times 10^{-6}$	25°C $\pm 3$ °C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	10	$\mu$ W	100 $\mu$ W max.
Operating Temp. Range	T <sub>use</sub>	-30 to +85	°C	
Storage Temp. Range	T <sub>stg</sub>	-40 to +105	°C	
Frequency Temp. Characteristics	f <sub>tem</sub>	$\pm 12$	$\times 10^{-6}$	Freq. deviation from the value at 32°C
Thermistor Resistance	—	Table 2	ohm	25°C
Thermistor B-Constant	—	Table 3	K	25°C to 50°C

Please contact us for other specifications.

Table 1 Motional Series Resistance

Frequency Range	Motional Series Resistance
19200/ 38400kHz	80 $\Omega$ max.

Table 2 Thermistor Resistance

Resistance	Specification
100k $\Omega$	$\pm 1\%$

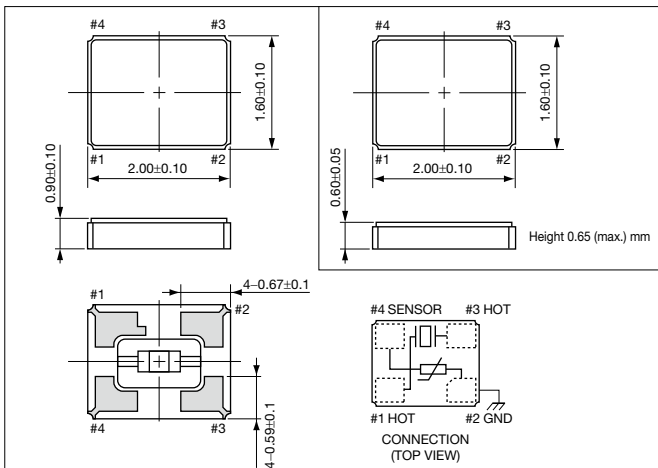
Table 3 Thermistor B-Constant

B-Constant	Specification
4250K	$\pm 1\%$

Crystal Units

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

