



2.0 × 1.6mm for Mobile Communications



RoHS Compliant
PSL: R4Y MSL1

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 ☐ ☐ ☐ ☐ ☐ ☐ CC
① ② ③ ④ ⑤ ⑥ ⑦

① Series

② Frequency

③ Load Capacitance

④ Frequency Tolerance

B0	6 pF	—
C0	7 pF	Std.

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

⑤ Operating Temp. Range

⑥ Frequency 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)

⑦ Individual Specification

(STD Specification is "CC" .)

Packaging (Tape & Reel 12000 pcs./ reel)

Specifications

Item	Symbol	Specification	Unit	Remarks
Frequency Range	f _{nom}	19200 / 38400	kHz	
Overtone Order	OT	Fundamental	—	
Load Capacitance	CL	7	pF	
Frequency Tolerance	f _{tol}	± 10	$\times 10^{-6}$	25° C $\pm 3^\circ$ C
Motional Series Resistance	R1	Table 1	ohm	
Drive Level	DL	10	μ W	100 μ W max.
Operating Temp. Range	T _{use}	- 30 to +85	° C	
Storage Temp. Range	T _{stg}	- 40 to +105	° C	
Frequency Temp. Characteristics	f _{tem}	± 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 Ω max.

Table 2 Thermistor Resistance

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

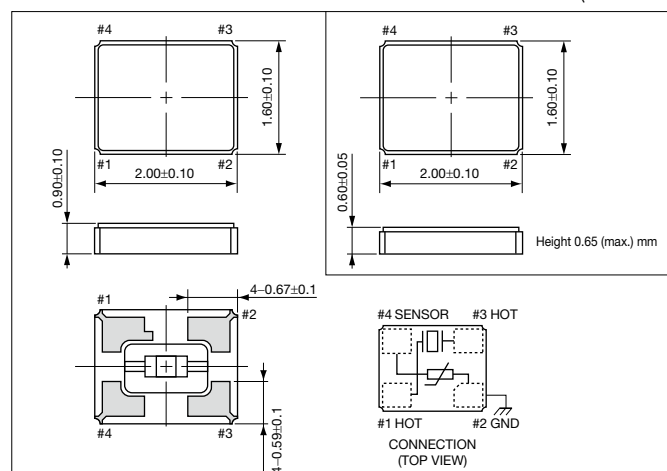
Table 3 Thermistor B-Constant

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

Crystal Units

Dimensions

(Unit: mm)



Recommended Land Pattern

(Unit: mm)

