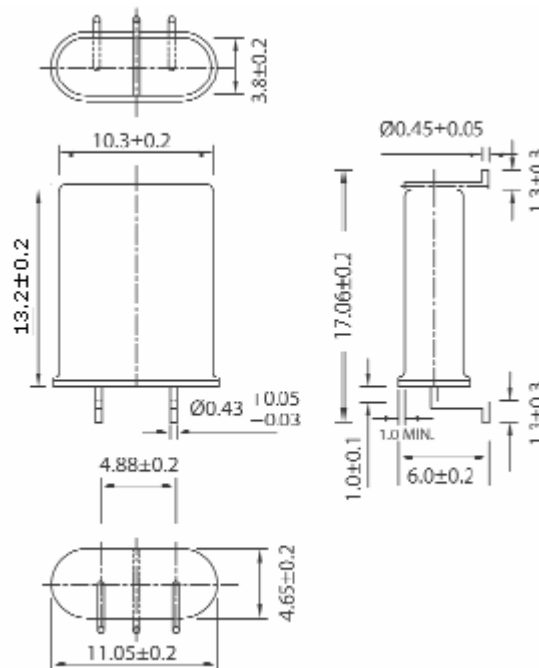


- TIGHT TOLERANCE & STABILITY, RoHS COMPLIANT DESIGN
- APPLICATION: ADSL, NETWORK CARD, A/V CARD, NETWORK PROCESSOR, ISDN

### Specification

Parameter	Characteristic
Frequency Range	1.8432MHz ~ 160.000MHz
Oscillation Mode	Fundamental / Third overtone / Fifth overtone
Holder type	HC49/UM
Frequency Tolerance ( @ 25℃)	(See Table 5)
Frequency Stability ( Ref. @ 25℃)	(See Table 6)
Equivalent Series Resistance (C.I)	(See Table 8)
Operating Temperature Range	-10 ~ +70℃ standard / -40 ~ +85℃ available
Storage Temperature Range	-40 ~ +90℃
Shunt Capacitance(Co)	7pF max
Load Capacitance(CL)	18pF standard (See Table 3)
Drive Level	10μW (1000μWmax)
Aging(at 25℃)	±5ppm / year max

### Drawing



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### Ordering Guide

Typical P/N : HC49/UM - 1.8432M - 18 - 1 10 15 Q - 700 - TR

1                      2                      3    4    5    6    7    8    9

**1. Package** HC49/UM = 11.05x6.0x17.06mm

(HC49/U - SMD - type Crystal Unit)

**2. Frequency range :** 1.8432 to 160MHz

1.8432MHz to 30MHz : Fundamental

20MHz to 90MHz : Third overtone

70MHz to 160MHz : Fifth overtone

**3. Load capacitance**

S : Series

10 : 10pF

18 : 18pF

20 : 20pF

30 : 30pF

**4. Oscillation Mode**

1 : Fundamental

3 : 3<sup>rd</sup> Overtone

5 : 5<sup>th</sup> Overtone

**5. Tolerance Options (Room Temperature)**

50 : +/- 50ppm

30 : +/- 30ppm

15 : +/- 15ppm

10 : +/- 10ppm

**6. Stability Options (Temperature Range)**

50 : +/- 50ppm

30 : +/- 30ppm

15 : +/- 15ppm

10 : +/- 10ppm

**7. Operating temperature range**

P : 0~60°C

Q : -10~70°C

R : -30~75°C

S : -40~85°C

\* : The others

**8. Equivalent Series Resistance (C.I)**

Fundamental	ERS	3rd Overtone	ERS
1.84MHz to 1.99MHz	700	20MHz to 24.99MHz	45
2MHz to 2.99MHz	500	25MHz to 90MHz	40
3MHz to 3.19MHz	200		
3.2MHz to 3.99MHz	150	5th Overtone	ERS
4MHz to 4.49MHz	90	70MHz to 160MHz	70
4.5MHz to 4.99MHz	70		
5MHz to 6.99MHz	50		
7MHz to 9.99MHz	35		
10MHz to 30MHz	25		

**9. Packing**

TR : Tape and Reel

B : Bulk