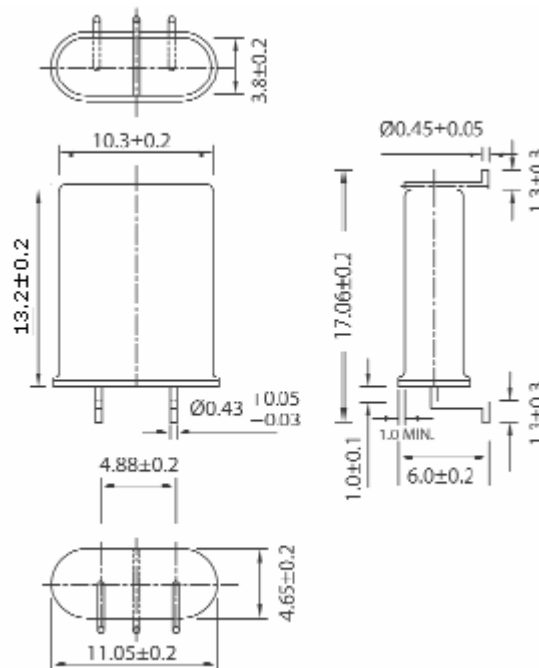


- TIGHT TOLERANCE & STABILITY, RoHS COMPLIANT DESIGN
- APPLICATION: ADSL, NETWORK CARD, A/V CARD, NETWORK PROCESSOR, ISDN

### Specification

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

<p><b>1. Package</b> HC49/UM = 11.05x6.0x17.06mm (HC49/U - SMD - type Crystal Unit)</p> <p><b>2. Frequency range :</b> 1.8432 to 160MHz              1.8432MHz to 30MHz : Fundamental              20MHz to 90MHz : Third overtone              70MHz to 160MHz : Fifth overtone</p> <p><b>3. Load capacitance</b>              S : Series              10 : 10pF              18 : 18pF              20 : 20pF              30 : 30pF</p> <p><b>4. Oscillation Mode</b>              1 : Fundamental              3 : 3<sup>rd</sup> Overtone              5 : 5<sup>th</sup> Overtone</p> <p><b>5. Tolerance Options (Room Temperature)</b>              50 : +/- 50ppm              30 : +/- 30ppm              15 : +/- 15ppm              10 : +/- 10ppm</p>	<p><b>6. Stability Options (Temperature Range)</b>              50 : +/- 50ppm              30 : +/- 30ppm              15 : +/- 15ppm              10 : +/- 10ppm</p> <p><b>7. Operating temperature range</b>              P : 0~60℃              Q : -10~70℃              R : -30~75℃              S : -40~85℃              * : The others</p> <p><b>8. Equivalent Series Resistance (C.I)</b></p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td>Fundamental</td> <td>ERS</td> <td>3rd Overtone</td> <td>ERS</td> </tr> <tr> <td>1.84MHz to 1.99MHz</td> <td>700</td> <td>20MHz to 24.99MHz</td> <td>45</td> </tr> <tr> <td>2MHz to 2.99MHz</td> <td>500</td> <td>25MHz to 90MHz</td> <td>40</td> </tr> <tr> <td>3MHz to 3.19MHz</td> <td>200</td> <td></td> <td></td> </tr> <tr> <td>3.2MHz to 3.99MHz</td> <td>150</td> <td>5th Overtone</td> <td>ERS</td> </tr> <tr> <td>4MHz to 4.49MHz</td> <td>90</td> <td>70MHz to 160MHz</td> <td>70</td> </tr> <tr> <td>4.5MHz to 4.99MHz</td> <td>70</td> <td></td> <td></td> </tr> <tr> <td>5MHz to 6.99MHz</td> <td>50</td> <td></td> <td></td> </tr> <tr> <td>7MHz to 9.99MHz</td> <td>35</td> <td></td> <td></td> </tr> <tr> <td>10MHz to 30MHz</td> <td>25</td> <td></td> <td></td> </tr> </table> <p><b>9. Packing</b>              TR : Tape and Reel              B : Bulk</p>	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		
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