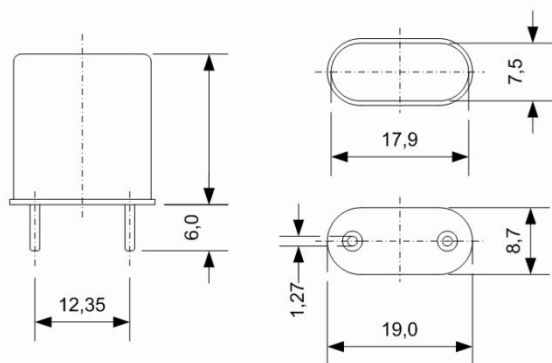


Table 1

ENCLOSURE	H [mm]	CODE	
HC-48/U	19.8	70	



Metal Housing: Resistance Weld  
Inert gas N<sub>2</sub>/He  
Laser engraving

Table 2

0.8 ... 250 MHz		Unit	Condition
Frequency range	0.8 - 250	MHz	
Crystal cut	AT		
Enclosure	HC-48/U		
Mode	1. 0.8 - 40 3. 15 - 100 5. 45 - 160 7. 100 - 210 9. 140 - 250	MHz MHz MHz MHz MHz	Fundamental 3 <sup>rd</sup> overtone 5 <sup>th</sup> overtone 7 <sup>th</sup> overtone 9 <sup>th</sup> overtone
Load capacitance	10 – 60pF or Series	pF	
Shunt capacitance	0.8 – 4.0 MHz: < 3.0 pF 4.0 – 10 MHz: < 5.0 pF 10 – 250 MHz: < 7.0 pF	pF	
Motional capacitance			
Resistance R <sub>R</sub>			see table 5
Frequency adjustment			see table 3
Nominal temperature and temp. stability			see table 4
Aging 1 <sup>st</sup> year	< 2.0 – 3.0	ppm	
Shock	100 g / 6 ms		
Vibration	10 g <sub>SS</sub> / 1.5 mm <sub>SS</sub> 50 – 500 Hz		
Δf / f	< 5.0	ppm	
ΔR / R	< 20 %		

Table 3

FREQUENCY ADJUSTMENT AT +25°C ± 2°C	FREQUENCY [MHz]					
	0.8 ... 40	15 ... 100	45 ... 160	100 ... 210	140 ... 250	Code
Mode	1	3	5	7	9	
Frequency adjustment / ppm	± 3	± 3	± 3			C1
	± 5	± 5	± 5	± 5	± 5	E1
	± 10	± 10	± 10	± 10	± 10	J1
	± 20	± 20	± 20	± 20	± 20	B2
	± 50	± 50	± 50	± 50	± 50	H2

Table 4

FREQUENCY STABILITY OVER TEMPERATURE RELATED TO + 25°C		FREQUENCY DEVIATION [ppm]							
0.8 ... 4.0 MHz: + 1.6 ... 5.0 MHz: x 5.0 ... 250 MHz: o		± 3	± 5	± 7	± 10	± 20	± 25	± 30	± 50
Temperature range	Code	03	05	07	10	12	13	14	20
0 ... + 50°C	B	o	xo	xo	xo	+xo	+xo	+xo	+xo
- 10 ... + 60°C	H	o	xo	xo	xo	+xo	+xo	+xo	+xo
- 20 ... + 70°C	M		o	xo	xo	+xo	+xo	+xo	+xo
- 30 ... + 80°C	R			o	xo	xo	xo	+xo	+xo
- 40 ... + 90°C	U				o	xo	xo	xo	+xo
- 55 ... + 105 °C	W						o	xo	+xo
- 55 ... + 125°C	X							o	xo

Table 5

MAX. RESISTANCE R <sub>R</sub>	MODE	FREQUENCY [MHz]	R <sub>RMAX</sub> [Ω]
	1	0.8 - 1.0	600
		1.0 - 1.3	400
		1.3 - 1.6	200
		1.6 - 3.0	150
		3.0 - 6.0	80
		6.0 - 15.0	40
		15.0 - 40.0	30
			3
	5	45 - 160	60
	7	100 - 210	100
	9	140 - 250	200

Table 6

Odering Code <sup>(1)</sup>	FREQUENCY [MHz]	ENCLOSURE CODE: TABLE 1	MODE: 1: FUND. 3,5,7,9: OT TABLE 2	LOAD CAP.: 00: SERIES 32: 32 pF TABLE 2	ADJ. Tolerance CODE: TABLE 3	TEMP: RANGE CODE: TABLE 4	FREQ. STAB. OVER TEMP. CODE: TABLE 4	SHUNT CAPACITANCE 35: 3.5 pF TABLE 2
	12.8	70	1	32	J1	M	10	35

<sup>(1)</sup> Other specifications on request

