

Table 1

ENCLOSURE	H [mm]	CODE	
HC-50/U	13.2	40	
	10.6	41	starting with 4 MHz
	9.2	42	starting with 10 MHz



Metal Housing: Resistance Weld
Inert gas N₂/He
Laser engraving

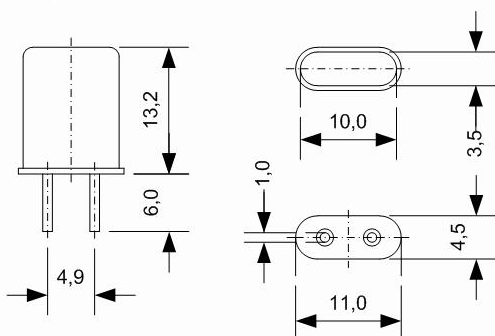


Table 2

1.8 ... 250 MHz		Unit	Condition																													
Frequency range	1.8 - 250	MHz																														
Crystal cut	AT																															
Enclosure	HC-50/U																															
Mode	<table border="1"> <tr><td>1.</td><td>1.8</td><td>-</td><td>40</td></tr> <tr><td>3.</td><td>15</td><td>-</td><td>100</td></tr> <tr><td>5.</td><td>45</td><td>-</td><td>160</td></tr> <tr><td>7.</td><td>100</td><td>-</td><td>210</td></tr> <tr><td>9.</td><td>140</td><td>-</td><td>250</td></tr> </table>	1.	1.8	-	40	3.	15	-	100	5.	45	-	160	7.	100	-	210	9.	140	-	250	<table border="1"> <tr><td>MHz</td><td>Fundamental</td></tr> <tr><td>MHz</td><td>3rd overtone</td></tr> <tr><td>MHz</td><td>5th overtone</td></tr> <tr><td>MHz</td><td>7th overtone</td></tr> <tr><td>MHz</td><td>9th overtone</td></tr> </table>	MHz	Fundamental	MHz	3 rd overtone	MHz	5 th overtone	MHz	7 th overtone	MHz	9 th overtone
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Load capacitance	10 – 60pF or Series	pF																														
Shunt capacitance	<table border="1"> <tr><td>1.8 - 4.0 MHz:</td><td>< 3.0 pF</td></tr> <tr><td>4.0 - 10 MHz:</td><td>< 5.0 pF</td></tr> <tr><td>10 - 250 MHz:</td><td>< 7.0 pF</td></tr> </table>	1.8 - 4.0 MHz:	< 3.0 pF	4.0 - 10 MHz:	< 5.0 pF	10 - 250 MHz:	< 7.0 pF	pF																								
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Motional capacitance																																
Resistance R _R			see table 5																													
Frequency adjustment			see table 3																													
Nominal temperature and temp. stability			see table 4																													
Aging 1 st year	< 2.0 – 3.0	ppm																														
Shock	100 g / 6 ms																															
Vibration	10 g _{SS} / 1.5 mm _{SS} 50 – 500 Hz																															
Δf / f	< 5.0	ppm																														
ΔR / R	< 20 %																															

Table 3

FREQUENCY ADJUSTMENT AT +25°C ± 2°C	FREQUENCY [MHz]					
	1.8 ... 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]							
1.8 ... 4.0 MHz: + 4.0 ... 6.0 MHz: x 6.0 ... 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 _R	MODE	FREQUENCY [MHz]	R _{RMAX} [Ω]
	1	1.8 - 2.0	500
		2.0 - 3.0	300
		3.0 - 5.0	120
		5.0 - 12	40
		12 - 40	15
	3	10 - 20	30
		20 - 100	22
	5	45 - 55	70
		55 - 160	50
	7	100 - 210	100
	9	140 - 250	180

Table 6

Odering Code ⁽¹⁾	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 25: 2.5 pF TABLE 2
	12.8	40	1	32	J1	M	10	25

⁽¹⁾ Other specifications on request

