



Specification: QTC-HC52U

Crystal unit: HC-52/U

TABLE 1

ENCLOSURE	H [mm]	CODE	
HC 52/U	8,6	01	
	7,8	02	starting with 10 MHz
	5,9	03	starting with 15 MHz



Metal housing: Resistance weld
Inert gas N₂/He
Laser engraving

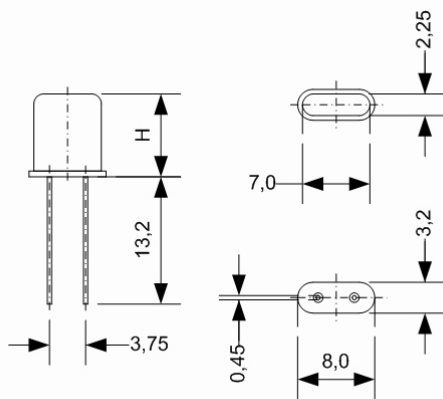


TABLE 2

	5,0 ... 250 MHz	UNIT	CONDITION
Frequency range	5 - 250	MHz	
Crystal cut	AT		
Enclosure	HC-52/U		
Mode	1. 5 - 40 3. 20 - 100 5. 50 - 160 7. 100 - 210 9. 140 - 250	MHz MHz MHz MHz MHz	Fundamental mode 3 rd overtone 5 th overtone 7 th overtone 9 th overtone
Load capacitance	10 - 60 pF or Series	pF	
Shunt capacitance	5 - 10 MHz: < 3,0 pF 10 - 15 MHz: < 5,0 pF 15 - 250 MHz: < 7,0 pF	pF	
Motional capacitance			
Resistance R _R			see table 5
Frequency adjustment			see table 3
Nominal temperature and temp. tolerance			see table 4
Aging 1 st year	< 2,0 - 3,0	ppm	
Shock	100g / 6ms		
Vibration	10g _{ss} / 1,5mm _{ss} 50 - 500 Hz		
Δf / f	< 5	ppm	
ΔR / R	< 20 %		



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TABLE 3

FREQUENCY ADJUSTMENT AT +25 ± 2°C	FREQUENCY [MHz]					
	5,0 ... 40	20 ... 100	50 ... 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							
5,0 ... 10 MHz: x 10 ... 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	5 - 7,5	80
		7,5 - 9	60
		9 - 12	30
		12 - 16	16
		16 - 35	12
	3	20 - 30	42
		30 - 50	30
		50 - 100	22
	5	100 - 160	70
	7	100 - 210	160
	9	140 - 250	200

TABLE 6

ORDERING 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: 2,5pF TABLE 2
	12,8	01	1	32	J1	M	10	25

⁽¹⁾ Other specifications on request