Datenblatt/Datasheet
QTNF-HC51U

Date: 22.10.2014
ROHS-compliance

Table 1

ENCLOSURE	H [mm]	CODE	
HC-51/U	19.8	60	

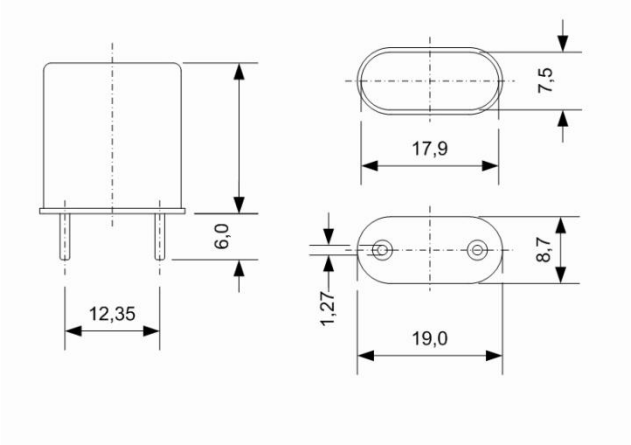

Table 2

45.0 … 1100 KHz		Unit	Condition
Frequency range	45.0 … 1100	KHz	
Crystal cut			See table 3
Enclosure	HC-51/U		
Mode	Fundamental		
Load capacitance	10 – 100 pF or Series	pF	
Shunt capacitance		pF	
Motional capacitance			
Resistance R_R			see table 6
Frequency adjustment			see table 4
Nominal temperature and temp. stability			see table 5
Aging 1st year	< ± 10	ppm	

Table 3

CRYSTAL CUT	FREQUENCY [KHz]					
	45 … 100	185 … 500	130 … 440	220 … 800	300 … 1100	Code
Flexural resonator	XY					XY
Longitudinal resonator		X				X
DT-Cut			DT			DT
CT-Cut				CT		CT
SL-Cut					SL	SL

Quarztechnik Daun GmbH
Quartz Crystals · Oscillators · Sensor Technology

Alte Darscheider Str. 15
54550 Daun · Germany

Phone: +49 0 6592-92070
Fax: +49 0 6592-7670

info@quarztechnik.com
www.quarztechnik.com

Table 4

FREQUENCY ADJUSTMENT AT +25°C ± 2°C	FREQUENCY [KHz]					
	45 ... 100	185 ... 500	130 ... 440	220 ... 800	300 ... 1100	Code
Frequency adjustment / ppm	± 10	± 10	± 10	± 10	± 10	J1
	± 20	± 20	± 20	± 20	± 20	B2
	± 50	± 50	± 50	± 50	± 50	H2

Table 5

FREQUENCY STABILITY OVER TEMPERATURE RELATED TO + 30°C		FREQUENCY DEVIATION [ppm]					
XY and X: x DT and SL: o CT: +		- 20	- 50	- 75	- 100	- 150	- 200
Temperature range	Code	02	03	04	05	06	07
+ 10 ... + 40°C	A	o	+xo	+xo	+xo	+xo	+xo
0 ... + 50°C	B		o	+xo	+xo	+xo	+xo
- 10 ... + 60°C	H		o	+o	+xo	+xo	+xo
- 20 ... + 70°C	M			o	+o	+xo	+xo
- 30 ... + 80°C	R			o	o	o	+xo
- 55 ... + 105°C	W					o	o

Table 6

MAX. RESISTANCE R_R	Crystal Cut	FREQUENCY [KHz]	R_{RMAX} [KΩ]
	XY	45 - 60	30
		60 - 100	15
	X	200 - 500	2
	DT	130 - 250	1
		250 - 440	1.5
	CT	220 - 400	0.8
		400 - 800	2
	SL	300 - 700	0.5
		700 - 1100	3

Table 6

Odering Code [1]	FREQUENCY [KHz]	CRYSTAL CUT CODE: TABLE 3	ENCLOSURE CODE: TABLE 1	LOAD CAP.: 00: SERIES 30: 30 pF TABLE 2	ADJ. Tolerance CODE: TABLE 4	TEMP: RANGE CODE: TABLE 5	FREQ. STAB. OVER TEMP. CODE: TABLE 5
	350	SL	60	30	B2	H	05

[1] **Other specifications on request**

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