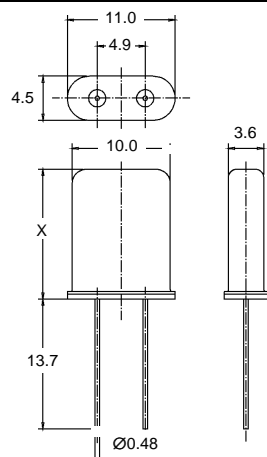


Quartz Crystal Units AT-Cut, 2.4 - 300 MHz



HC-49/U: X = 13.4
 HC-49/11mm: X = 11.5
 HC-49/9mm: X = 9.8

HC-49/9mm starting with 4.5 MHz

DIN 45110: M4
 IEC 122-3: DP
 NFC-93-601: n⁰ 5
 MIL-H-10056: HC-49/U
 Welded metal enclosure
 (inert atmosphere)
 with wire leads

All dimensions in mm (max)

HC-49/U			Temperature Stability in the Temperature Range						
			-55°C...+105°C		-20°C...+70°C				Nom. Temp. ± 5°C ¹⁾
Overtone	Frequency [MHz]	Type	± 50ppm	± 25ppm	± 20ppm	± 10ppm	± 7ppm	± 5ppm	± 2ppm
1.OT	2.4...5.2	XS 27xx	01	02	03	04	06	-----	05
	5.2...10	XS 27xx	01	02	03	04	06	07	05
	10...30	XS 28xx	01	02	03	04	06	07	05
3.OT	20...100	XS 28xx	11	12	13	14	16	17	15
5.OT	50...160	XS 29xx	01	02	03	04	06	07	05
7.OT	110...210	XS 30xx	01	02	03	04	06	07	05
9.OT	150...300	XS 31xx	01	02	03	04	06	07	05

Calibration tolerance: ± 10 ppm

¹⁾ Nom. Temp. = Nominal temperature for oven application to be given with the order.

Motional Resistance R1

Overtone	Frequency [MHz]	R1max [Ω]
1. OT	2.4...3	250
1. OT	3...5.2	120
1. OT	5.2...6	80
1. OT	6...8	60
1. OT	8...10	40
1. OT	10...15	30
1. OT	15...35	25
3. OT	20...100	40
5. OT	50...160	60
7. OT	110...210	100
9. OT	150...300	200

Standard resonance for fundamental crystals: load resonance with $C_L = 30 \pm 0.5\text{pF}$
 Overtone crystals: series mode
 Shunt capacitance: $C_0 = 7\text{pF max}$

Crystal units with different tolerances or additional data upon request.

Modifications:

HC-49/U-3, HC-49/11mm-3, HC-49/9mm-3: 3rd wire (ground)
 HC-49/U-S, HC-49/11mm-S: 3-point mounting for exposure to extreme accelerations (shock and vibr.)
 HC-49/U-3-S, HC-49/11mm-3-S: 3-point mounting for exposure to extreme accelerations (shock and vibr.)
 SMD-Versions with metal clip.



VECTRON
 INTERNATIONAL
 A DOVER TECHNOLOGIES COMPANY

166 Glover Avenue
 Norwalk, CT 06856

Tel: 1-88-VECTRON-1
 Fax: 1-888-FAX-VECTRON
 www.vectron.com