



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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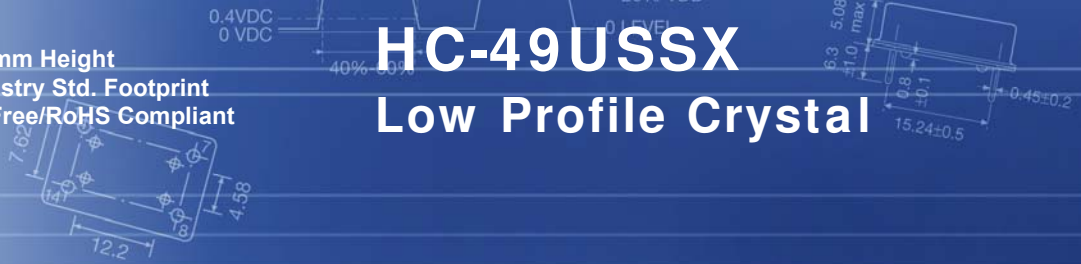
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



- ▶ 2.1 mm Height
- ▶ Industry Std. Footprint
- ▶ Pb Free/RoHS Compliant

HC-49USSX

Low Profile Crystal



OPERATING CONDITIONS / ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	HC-49USSX			UNITS
		MIN	TYP	MAX	
Frequency Range		3.57		50.000	MHz
Frequency Tolerance	at +25°C			± 30	ppm
Frequency Stability	-10 to +70°C			± 50	ppm
Shunt Capacitance				5	pF
Load Capacitance	Specify in P/N	10	20	Series	pF
Drive Level				500	µW
Operating Temperature		-10		+70	°C
Storage Temperature		-40		+105	°C
Aging (Per Year)	@ +25°C ±3°C			±5	ppm

EQUIVALENT SERIES RESISTANCE/MODE OF OSCILLATION

FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω	FREQUENCY RANGE (MHz)	MODE OF OSC	MAX ESR Ω
3.57 ~ 4.999	Fundamental	150	13.000 ~ 19.999	Fundamental	50
5.000 ~ 5.999	Fundamental	120	20.000 ~ 30.000	Fundamental	40
6.000 ~ 6.999	Fundamental	100	26.000 ~ 39.999	3rd Overtone	100
7.000 ~ 8.999	Fundamental	80	40.000 ~ 50.000	3rd Overtone	80
9.000 ~ 12.999	Fundamental	60			

DIMENSIONS (mm)

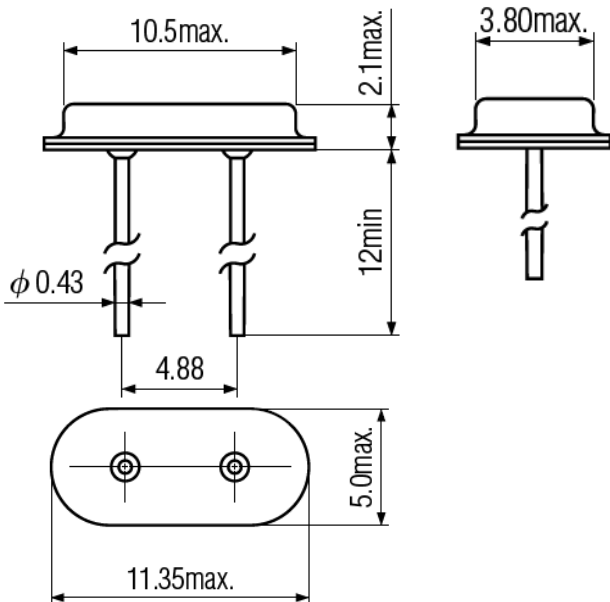


Figure 1) Top, Side and Bottom views

PART NUMBERING GUIDE: Example ECS-200-20-4VX

ECS - Frequency Abbreviation - Load Capacitance - Package

200 = 20.000 MHz
See P/N Guide

20 = 20 pF
S=Series

4VX = HC-49USSX