

HC49USSMD

Features:

- Wide frequency range
- Tight tolerance and stability over temperature
- Tape & reel packaging
- 3 pin-version available



Specifications				
		Symbol	HC49USSMD	Remarks
Frequency range		f	3.579MHz ~ 35.000MHz	Fund. mode
			30.000MHz ~ 90.000MHz	Overtone mode
Frequency tolerance, Ta=25°C		f/f	± 3ppm ~ ± 50ppm	Please specify
Load capacitance		C _L	5pF ~ 50pF or user specify	Please specify
Temperature tolerance		f/f	±3ppm ~ ± 50ppm	Please specify
Temperature range	Storage temperature	T _{STG}	-40°C ~ +105°C	
	Operating temperature	T _{OPR}	0°C ~ +70°C / -40°C ~ +105°C	Others are offered
Drive level	Maximum drive level	M _{DL}	1000 W	
	Recommended drive level	R _{DL}	10 W ~ 100 W	
Series resistance		R ₁	As per table	25°C
Shunt capacitance		C ₀	7pF	Max
Insulation resistance		I _R	500M Ohm	
Aging		f _A	± 1ppm ~ ±5ppm/Year	Please specify

Resistance of series resonance (ESR)						
Frequency (MHz)	Mode	Ohm max		Frequency (MHz)	Mode	Ohm max
3.579 <= f < 6.0	Fundamental	150		15.0 <= f < 35.0	Fundamental	40
6.0 <= f < 10.0	Fundamental	100		30.0 <= f < 90.0	3rd OT	70
10.0 <= f < 15.0	Fundamental	60				

Drawing

HC49USSMD

13.0 max

4.8 max

11.4±0.2

0.8

4±0.3

4±0.3

4.5

4.0

4.5

2.0

4,5mm max. = standard

3,2mm max. = option "L"

Option "3P"

3 Pin-version

0.8

4.88

11.4

RECOMMENDED SOLDERING PATTERN

Order key								
Q	- 20.000000M	- HC49USSMD	- F	- 30	- 50	- D	- 30	- TR
Part	Frequency	Package	Mode of oscillation	Frequency tolerance	Temperature tolerance	Temperature range	Load capacitance	Option
Q=Quartz	M=MHz	HC49USSMD	F=fund. 3=3.OT	+/-ppm (25°C)	+/-ppm (Temp. range)	A= 0°C ~ 70°C B=-10°C ~ 60°C C=-10°C ~ 70°C D=-20°C ~ 70°C E=-40°C ~ 85°C F=-40°C ~ 105°C G=-40°C ~ 125°C H=-20°C ~ +80°C I=-10°C ~ +50°C	pF SR=series	3P=3Pin version L=Low hight TR=Tape and reel X=Special options

Remarks: All specifications subject to change without notice!

2.5