



Features:

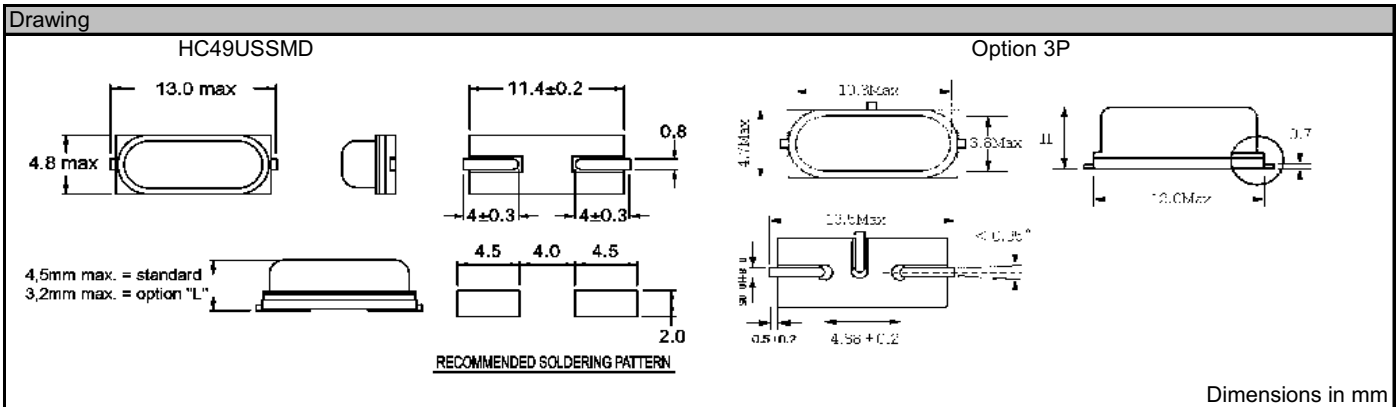
- Low profile available
- Wide frequency range
- Tight tolerance and stability over temperature
- Tape & reel packaging
- 3 pin-version available



HC49USSMD

Specifications				
		Symbol	HC49USSMD	Remarks
Frequency range		f	3.500MHz ~ 40.000MHz	Fund. mode
			30.000MHz ~ 90.000MHz	Overtone mode
Frequency tolerance, Ta=25°C		$\Delta f/f$	$\pm 3\text{ppm} \sim \pm 50\text{ppm}$	Please specify
Load capacitance		$C_L$	5pF ~ 50pF	Please specify
Temperature tolerance		$\Delta f/f$	$\pm 3\text{ppm} \sim \pm 50\text{ppm}$	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 $\mu$ W	
	Recommended drive level	$R_{DL}$	10 $\mu$ W ~ 100 $\mu$ W	
Series resistance		$R_1$	As per table	25°C $\pm 3^\circ$ C
Shunt capacitance		$C_0$	7pF	Max
Insulation resistance		$I_R$	500M Ohm	Min
Aging		$\Delta f_A$	$\pm 5\text{ppm/Year}$	Please specify

Resistance of series resonance (ESR)					
Frequency (MHz)	Mode	Ohm max	Frequency (MHz)	Mode	Ohm max
3.5 ≤ f < 4.5	Fundamental	130	12.0 ≤ f < 15.0	Fundamental	40
4.5 ≤ f < 6.0	Fundamental	90	15.0 ≤ f < 18.0	Fundamental	30
6.0 ≤ f < 8.0	Fundamental	70	18.0 ≤ f < 33.0	Fundamental	25
8.0 ≤ f < 10.0	Fundamental	60	30.0 ≤ f < 40.0	3rd OT	80
10.0 ≤ f < 12.0	Fundamental	50	40.0 ≤ f < 90.0	3rd OT	60



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	$\pm$ ppm (25°C)	$\pm$ 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 high TR=Tape and reel X=Special options