

# HC-49USM Crystal (TWO PADS)

## Part Number Guide

T-M-FF.FFFM-LC-FTFS-OT-ESR

**T**(Type型号): M=HC-49USM with height of 4.0mm Max  
 M2=HC-49USM with height of 3.5mm Max  
 M3=HC-49USM with height of 3.2mm Max  
 M4=HC-49USM with height of 3.0mm Max

**M**(Mode of Operation振荡模式): F=Fundamental T=Third Overtone, etc

**F**(Frequency标称频率): Normal - 5 digitals of Frequency, e.g. 8.0000M, 12.000M  
 Special - All digitals of Frequency, e.g. 13.225625M

**LC**(Load Capacitance负载电容): 20=20pf 00=series, etc

**FT**(Frequency Tolerance调整频差): 30=±30 ppm, etc

**FS**(Frequency Stability温度频差): 50=±50 ppm, etc

**OT**(Operating Temperature工作温度): 1060=-10°C to +60°C 4085=-40°C to +85°C, etc

**ESR**(Equivalent Series Resistance等效阻抗)



Pb Free      RoHS Compliant  
 Directive 2002/95/EC

## Electrical Specifications 电气参数

Item 项目	Spec 规格	Condition 条件	
Frequency Range 频率范围	3.2768MHz~40.68MHz	For further questions regarding specifications, please feel free to contact us. 对于超出标准的规格, 请联系我们	
Operating Temperature 工作温度	-40~85°C, -55~125°C		
Drive Level 激励功率	100 μw max	It is recommended to use 1 μw~100 μw 推荐1 μw~100 μw	
Load Capacitance 负载电容	7pF~∞	For further questions regarding specifications, please feel free to contact us. 对于超出标准的规格, 请联系我们	
Frequency Tolerance 调整频差	±30ppm Standard (±10~±50ppm Available)		
Frequency Stability 温度频差	±30ppm@-40~85°C ±50ppm@-55~125°C		
Aging 老化率	±5ppm		
Storage Temperature 储存温度	-55~125°C		
ESR 等效阻抗 (Ω)	3.2768MHz ≤ F0 < 4MHz		150 Ω
	4MHz ≤ F0 < 5MHz		120 Ω
	5MHz ≤ F0 < 6MHz	100 Ω	
	6MHz ≤ F0 < 7MHz	80 Ω	
	7MHz ≤ F0 < 10MHz	60 Ω	
	10MHz ≤ F0 < 14MHz	50 Ω	
	14MHz ≤ F0 < 20MHz	40 Ω	
	20MHz ≤ F0 < 40.68MHz	30 Ω	

## Mechanical Dimensions 外型尺寸

Drawing For M

