

# HC-49U Crystal

## Part Number Guide

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

T (Type 型号): U=HC-49U, 2 Leads with height of 13.2mm Max  
 U2=HC-49T, 2 Leads with height of 10.35mm Max  
 UB=HC-49U, 3 Leads with height of 13.2mm Max  
 UB2=HC-49T, 3 Leads with height of 10.35mm 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

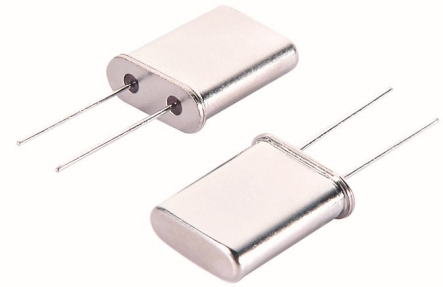
LC (Load Capacitance 负载电容): 20=20pf 00=series, etc

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)



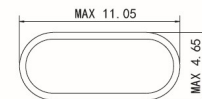
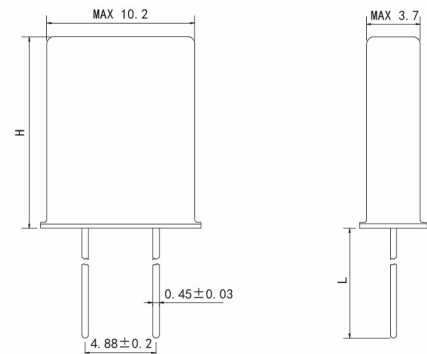
Pb Free  
 RoHS Compliant  
 Directive 2002/95/EC

## Electrical Specifications 电气参数

Item 项目	Spec 规格	Condition 条件	
Frequency Range 频率范围	2.5MHz~40MHz	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)	2.5MHz ≤ F0 < 3MHz		350 Ω
	3MHz ≤ F0 < 4MHz		90 Ω
	4MHz ≤ F0 < 5MHz	70 Ω	
	5MHz ≤ F0 < 8MHz	60 Ω	
	8MHz ≤ F0 < 10MHz	50 Ω	
	10MHz ≤ F0 < 20MHz	30 Ω	
	20MHz ≤ F0 < 40MHz	25 Ω	

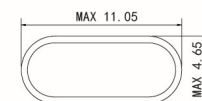
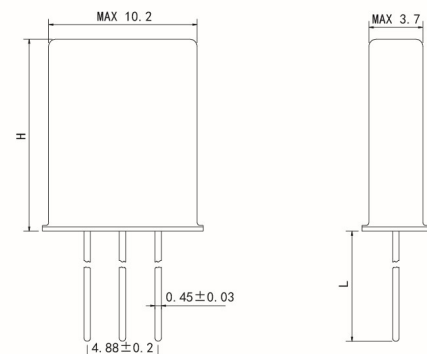
## Mechanical Dimensions 外型尺寸

U: TWO LEADS (两引线) UNIT (单位): mm (毫米)



UNIT (单位): mm (毫米)  
 H: U=13.2mm MAX  
 U2=10.35mm MAX  
 L: 13.2mm or 20.0mm Typical  
 (For taping, only 20.0mm suitable)

UB: THREE LEADS (三引线) UNIT (单位): mm (毫米)



UNIT (单位): mm (毫米)  
 H: U=13.2mm MAX  
 U2=10.35mm MAX  
 L: 13.2mm or 20.0mm Typical  
 (For taping, only 20.0mm suitable)