



DIP QUARTZ CRYSTAL RESONATOR

石英晶体谐振器



Dip Crystal 11.4×4.8 mm HC-49U

- Wave Soldering Temperature: 265°C max
- highly stable and reliable crystal unit with a metallic package
- Taped Version Available



RoHS compliant

★ PARAMETERS

技术参数

PARAMETERS	参数	SPECIFICATION 规格
Frequency Range	频率范围	1.8~100MHz
Operation Mode	振动模式	(1.8~36MHz) Fundamental (27~100MHz) 3rd Overtone
Loading Capacitance	负载电容	20pF Std. 8 to 33pF, Series available
Drive Level	激励电平	100 μ W (500 μ W max)
Frequency Tolerance	频率偏差	±10ppm ~ ±30ppm (at 25°C)
Equivalent Resistance	谐振电阻	See Below
Frequency Stability	频率稳定性	±10ppm ~ ±50ppm
Operating Temp. Range:	工作温度范围	0 ~ +50°C to -40 ~ +85°C
Storage Temp. Range:	储存温度范围	-40 ~ +85°C

○ All specification subject change without notice. 规格变化, 恕不另行通知。

★ FREQUENCY STABILITY VS. TEMPERATURE 频率温度特性

Operation Temperature Range	Frequency Stability			
	±10ppm	±20ppm	±30ppm	±50ppm
0°C~+50°C	○	●	○	○
-10°C~+60°C	○	●	○	○
-20°C~+70°C	○	○	●	○
-40°C~+85°C	○	○	○	●

● standard ○ available

★ ESR (SERIES RESISTANCE RS)

Frequency	Vibration Mode	ESR
1.800-1.999MHz	AT CUT/FUND.	600Ω (max)
2.000-2.399MHz	AT CUT/FUND.	450Ω (max)
2.400-2.999MHz	AT CUT/FUND.	350Ω (max)
3.000-3.499MHz	AT CUT/FUND.	150Ω (max)
3.500-3.999MHz	AT CUT/FUND.	90Ω (max)
4.000-6.999MHz	AT CUT/FUND.	70Ω (max)
7.000-9.999MHz	AT CUT/FUND.	50Ω (max)
10.000-15.999MHz	AT CUT/FUND.	30Ω (max)
16.000-36.000MHz	AT CUT/FUND.	25Ω (max)
27.000-29.000MHz	AT 3rd /OT	30Ω (max)
30.000-100.00MHz	AT 3rd /OT	40Ω (max)

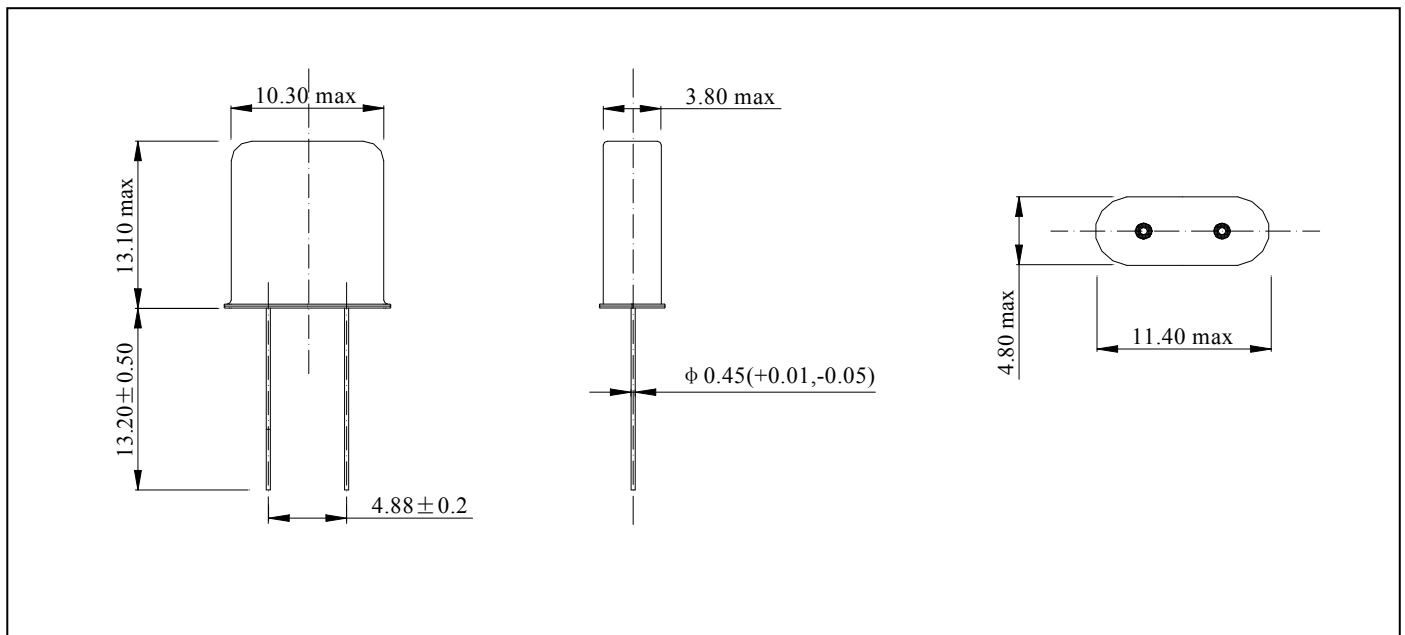
★ PART NUMBER GUIDE 部件号示例 e.g. H LX16.000M20U-30/30B (*U=HC49U TYPE)

Logo	Quartz Crystal Resonator 石英晶体谐振器	Frequency 频率 Hz	Load Capacitance 负载电容 pF	Package 盒型	Frequency Tolerance 常温频差 ppm	Frequency Stability 温度频差 ppm	Operating Temp. Range 工作温度
HL	X	16.000M	20	U	30	30	B



Definition	Description
Operating Temperature Range	A: -10~+60°C
	B: -20~+70°C
	C: -30~+80°C
	D: -40~+85°C
	E: Customer specified

★ DIMENSIONS (Unit: mm) 外形尺寸



★ WAVE SOLDERING PROFILE 波峰焊特性

