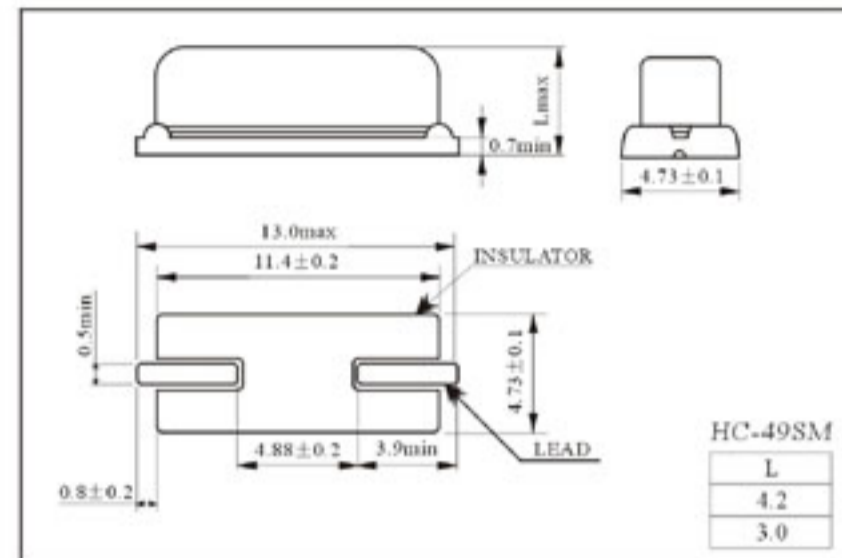
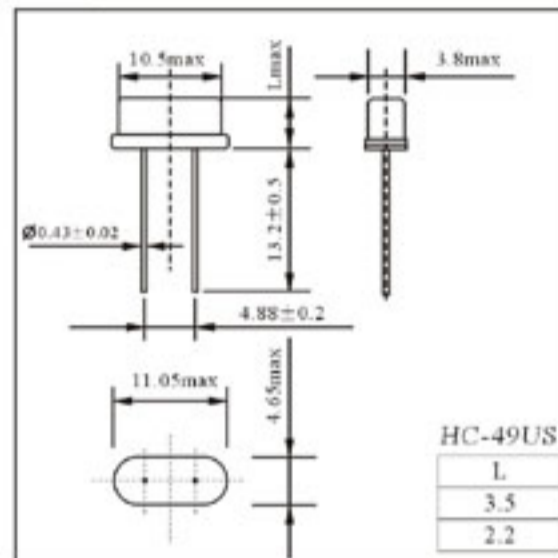


**QUARTZ CRYSTAL RESONATOR**
**石英晶体谐振器**
**HC-49US/HC-49SM DIP/SMD TYPE**
**⊕ DIMENSIONS (Unit:mm) 外形尺寸**

**⊕ PART NUMBER GUIDE 部件号示例 e.g. FTX3.579M20S (\*S=HC-49US SM=HC-49SM)**

	Quartz Crystal Resonator 石英晶体谐振器	Frequency 频率	Load Capacitance 负载电容	*Package Type 盒形
FT	X	3.579MHz	20	S

**⊕ 1.PARAMETERS 技术参数**

PARAMETER	参数	SPECIFICATION 规格
Frequency Range	频率范围 (MHz)	3.0MHz~75.0MHz
Operation Mode	振动模式	See Table 2 见表2
Load capacitance $C_L$	负载电容 (pF)	20pF Std. 8 to 35pF series available
Frequency Tolerance $F_L$	调整频差 (ppm)	$\pm 20$ ppm@25°C Std. ( $\pm 5$ ppm~ $\pm 100$ ppm available)
Temperature Tolerance $T_L$	温度频差 (ppm)	$\pm 20$ ppm Std. (See Table 3 见表3)
Operating Temperature $T_o$	工作温度 (°C)	-10°C to +60°C Std. (See Table 3 见表3)
Storage Temperature $S_T$	储存温度 (°C)	-40°C to +85°C
Motional Resistance $R_c$	谐振电阻 ( $\Omega$ )	See Table 2 见表2
Shunt Capacitance $C_o$	静态电容 (pF)	7pF max
Drive Level $D_L$	激励电平 (mW)	0.01mW~1mW
Insulation Resistance $I_k$	绝缘电阻 (M $\Omega$ )	500(DC500 $\pm$ 10V) min
Aging@25°C	年老化率 (ppm/y)	$\pm 5$ ppm max

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

**⊕ 2. OPERATION MODE AND RS 振动模式与谐振电阻**

FREQUENCY	TYPE	MODE	HC-49U/S ( $\Omega$ max)
3.0MHz~3.5MHz		FUND	300
3.5MHz~3.8MHz		FUND	150
3.8MHz~4.1MHz		FUND	120
4.1MHz~5.0MHz		FUND	100
5.0MHz~6.0MHz		FUND	80
6.0MHz~8.0MHz		FUND	70
8.0MHz~10.0MHz		FUND	60
10.0MHz~12.0MHz		FUND	50
12.0MHz~28.0MHz		FUND	40
28.0MHz~33.5MHz		FUND	50
26.0MHz~40.0MHz		3 <sup>rd</sup> OVERTONE	100
20.0MHz~40.0MHz		BT Found	40

**⊕ 3. FREQUENCY-TEMPERATURE TOLERANCE 温度频差**

- Recommended 推荐使用
- Available 可用

Cutting 切型	Temp. Range	Tolerance(ppm)					
		$\pm 5$	$\pm 10$	$\pm 15$	$\pm 20$	$\pm 30$	$\pm 50$
AT	0°C~+50°C	○	○	○	○	○	○
	-10°C~+60°C		○	○	●		○
	-20°C~+70°C			○	○	●	
	-30°C~+80°C				○	○	○
	-40°C~+85°C						○
BT	Freq. vs temp. for cutting within a range of $\pm 80$ ppm~ $\pm 120$ ppm BT 切温度频差一般为 $\pm 80$ ppm~ $\pm 120$ ppm						