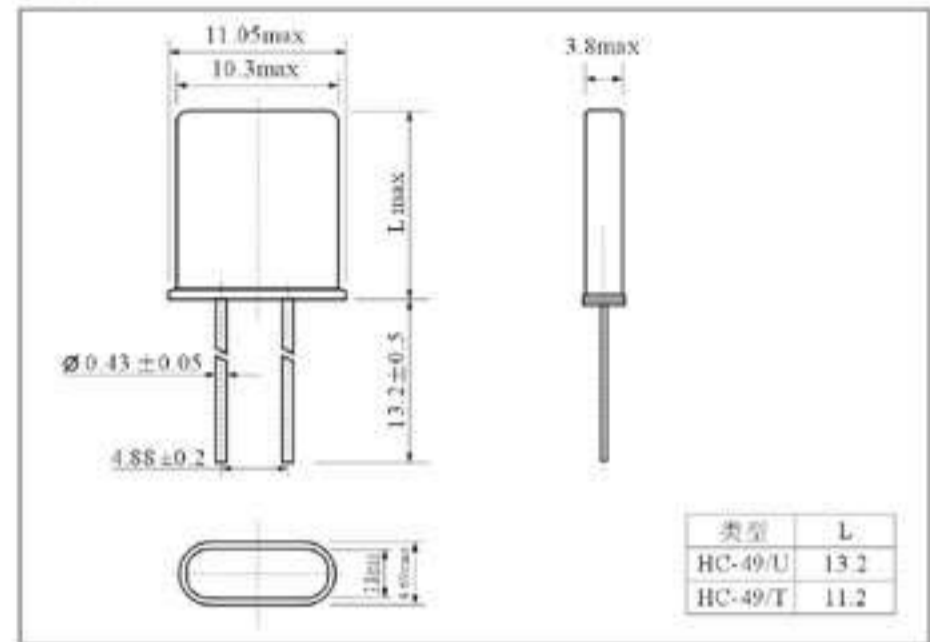
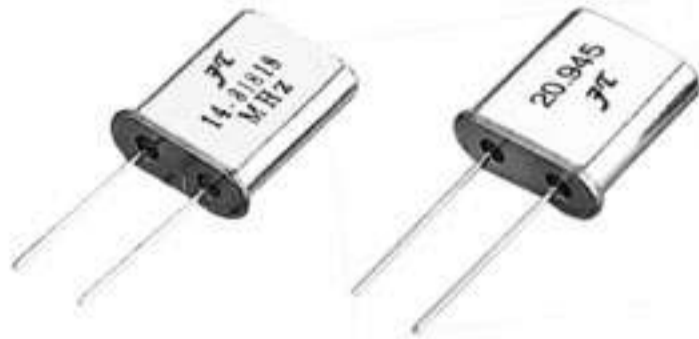


**QUARTZ CRYSTAL RESONATOR**
**石英晶体谐振器**
**HC-49U/HC-49T DIP TYPE**
**⊕ DIMENSIONS (Unit: mm) 外形尺寸**

**⊕ PART NUMBER GUIDE 部件号示例 e.g. FTX14.318M20U (\*U=HC-49U T=HC-49T)**

	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	14.318MHz	20	U

**⊕ 1. PARAMETERS 技术参数**

PARAMETER	参数	SPECIFICATION 规格
Frequency Range	频率范围 (MHz)	1.8MHz~100MHz
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)	$\pm 20\text{ppm}@25^\circ\text{C}$ Std. ( $\pm 5\text{ppm} \sim \pm 100\text{ppm}$ available)
Temperature Tolerance $T_L$	温度频差 (ppm)	$\pm 20\text{ppm}$ Std. (See Table 3 见表3)
Operating Temperature $T_o$	工作温度 ( $^\circ\text{C}$ )	$-20^\circ\text{C}$ to $+70^\circ\text{C}$ Std. (See Table 3 见表3)
Storage Temperature $S_T$	储存温度 ( $^\circ\text{C}$ )	$-40^\circ\text{C}$ to $+85^\circ\text{C}$
Motional Resistance $R_L$	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 $I_L$	绝缘电阻 (M $\Omega$ )	500( DC500 $\pm$ 10V ) min
Aging@25 $^\circ\text{C}$	年老化率 (ppm/y)	$\pm 5\text{ppm}$ 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-49T ( $\Omega_{\text{max}}$ )	HC-49U ( $\Omega_{\text{max}}$ )
1.8MHz~2.0MHz		FUND		600
2.0MHz~2.4MHz		FUND		450
2.4MHz~3.0MHz		FUND		350
3.0MHz~3.5MHz		FUND		150
3.5MHz~4.0MHz		FUND	150	90
4.0MHz~7.0MHz		FUND	90	70
7.0MHz~10MHz		FUND	50	50
10MHz~15MHz		FUND	45	35
15MHz~20MHz		FUND	25	25
20MHz~25MHz		FUND/3 <sup>rd</sup> OVERTONE	25/60	25/50
25MHz~30MHz		FUND/3 <sup>rd</sup> OVERTONE	25/40	25/40
30MHz~75MHz		3 <sup>rd</sup> OVERTONE	40	40
75MHz~100MHz		3 <sup>rd</sup> /5 <sup>th</sup> OVERTONE	50/60	50/60
20MHz~40MHz		BT FUND	40	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 $^\circ\text{C}$ ~+50 $^\circ\text{C}$	○	○	○	○	○	○
	-10 $^\circ\text{C}$ ~+60 $^\circ\text{C}$		○	○	●	○	○
	-20 $^\circ\text{C}$ ~+70 $^\circ\text{C}$			○	○	●	○
	-30 $^\circ\text{C}$ ~+80 $^\circ\text{C}$				○	○	
	-40 $^\circ\text{C}$ ~+85 $^\circ\text{C}$						○
BT	Within a range of $\pm 80 \sim \pm 120\text{ppm}$ BT 切温度频差一般为 $\pm 80 \sim \pm 120\text{ppm}$						