

**Electrical Specification**
**HC-49U/T/R/G DIP**

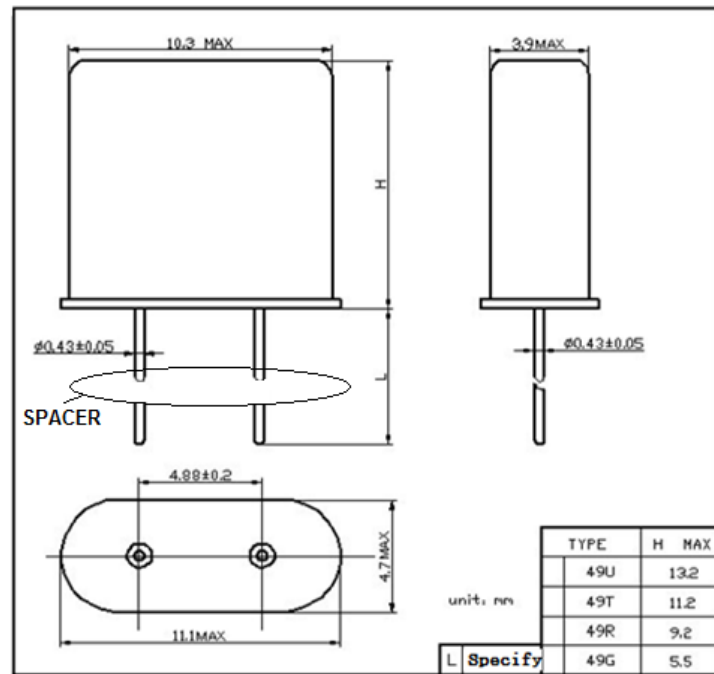
Oscillation Mode	AT-CUT			BT-CUT
	Fundamental	3RD	5TH	Fundamental
Normal Frequency:	1.50~40MHz	27~100MHz	80~120MHz	36~50MHz
Load Capacitance(CL):	Seris、6~33PF、 or specify			Seris、6~33PF、 or specify
Frequency Tolerance 25±3°C:	±10、±20、±30PPM、 or specify			±10、±20、±30PPM、 or specify
Frequency Stability Over Temperature Range	±10、±20、±30PPM、 or specify			±50、±80、±100PPM、 or specify
Operation Temperature Range:	-20~70°C、 -40~85°C、 or specify			-20~70°C、 -40~85°C、 or specify
Storage Temperature Range:	-40~85°C			-40~85°C
Shunt Capacitance(C0):	7pF Max			7pF Max
Drive Level:	1~1000μW(100 μW TYP)			1~1000μW(100 μW TYP)
Insulation Resistance:	500 MΩ Minimum at DC 100V			500 MΩ Minimum at DC 100V
Aging:	±3 PPM/Year			±3 PPM/Year

**Frequency Stability Over Temperature Range:**

Temperature Range °C	AT-CUT Frequency Stability(ppm)							BT-CUT Frequency Stability(ppm)		
	±3	±5	±7.5	±10	±15	±20	±30	±50	±80	±100
0~+50	*	*	*	*	*	*	*	*	*	*
-10~+60		*	*	*	*	*	*	*	*	*
-20~+70			*	*	*	*	*		*	*
-30~+80				*	*	*	*			*
-40~+85					*	*	*			*

**Equivalent Seris Resistance (ESR)**

Frequency Range MHz	Mode	ESR Ω(MAX)
1.50~1.99	AT-FUND	500
2.00~2.99	AT-FUND	400
3.00~3.49	AT-FUND	150
3.50~3.99	AT-FUND	120
4.00~4.49	AT-FUND	100
4.50~4.99	AT-FUND	80
5.00~5.99	AT-FUND	70
6.00~6.99	AT-FUND	60
7.00~7.99	AT-FUND	40
8.00~14.99	AT-FUND	30
15.00~40.00	AT-FUND	25
27.00~29.99	AT-3RD	50
30.00~44.99	AT-3RD	40
45.00~100.0	AT-3RD	35
80.00~120.0	AT-5TH	80
36.00~50.00	BT-FUND	30

**Dimensions**

**PART NUMBERING SYSTEM (Example)**
