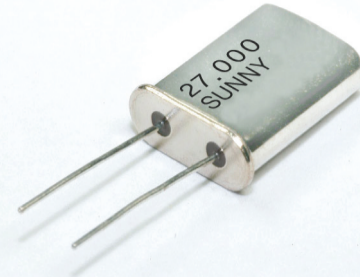


# HC TYPE HC-49/U

- HC-49/U package
- AT cut available
- Resistance weld seal
- Tape and reel, insulator tab, 3rd lead, and custom lead length options available
- Pb-free and RoHS compliance



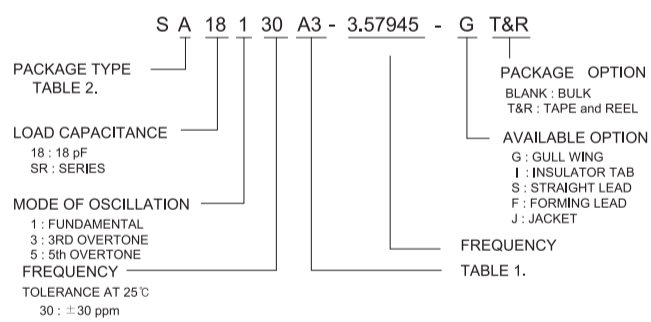
## ELECTRICAL SPECIFICATIONS

Frequency Range	1.700 to 85.000MHz
Operating Temperature Range	-10 to +60°C(STD), -20 to +70°C, or Specify
Storage Temperature Range	-40 to +85°C
Frequency Tolerance (at 25°C)	± 15, ± 30, ± 50ppm(STD), or Specify
Frequency stability Over Operating Temperature Range	See Table1 in page 4 ± 30, ± 50(STD), ± 100ppm
Load Capacitance(CL)	18pF(STD), Custom CL≥10pF or Series Resonant
Drive Level	100 $\mu$ W(1000 $\mu$ W max.)
Shunt Capacitance(Co)	7.0pF max.
Aging (at 25°C)	± 5.0ppm/year max.
Insulation Resistance	500M $\Omega$ min. at 100V <sub>DC</sub>

## EQUIVALENT SERIES RESISTANCE(ESR)

Frequency Range(MHz)	ESR( $\Omega$ MAX.)	Mode of Oscillation
1.700 ~ 1.999	600	Fundamental
2.000 ~ 2.999	500	Fundamental
3.000 ~ 3.499	150	Fundamental
3.500 ~ 3.999	120	Fundamental
4.000 ~ 4.999	100	Fundamental
5.000 ~ 5.999	80	Fundamental
6.000 ~ 6.999	60	Fundamental
7.000 ~ 7.999	50	Fundamental
8.000 ~ 9.999	40	Fundamental
10.000 ~ 12.999	30	Fundamental
13.000 ~ 30.000	25	Fundamental
24.000 ~ 29.999	60	3rd Overtone
30.000 ~ 85.000	40	3rd Overtone

## PART NUMBERING GUIDE



## TABLE 1.

FREQUENCY STABILITY VS. TEMPERATURE RANGE		Stability							
Temp	Stability	± 5	± 7.5	± 10	± 15	± 20	± 30	± 50	± 100
		1	2	3	4	5	6	7	8
-10 ~ 60°C	A	*	*	*	*	*	*	*	*
-20 ~ 60°C	B		*	*	*	*	*	*	*
0 ~ 70°C	C		*	*	*	*	*	*	*
-10 ~ 70°C	D		*	*	*	*	*	*	*
-20 ~ 70°C	E		*	*	*	*	*	*	*
-30 ~ 60°C	F		*	*	*	*	*	*	*
-20 ~ 85°C	G			*	*	*	*	*	*
-30 ~ 70°C	H			*	*	*	*	*	*
-30 ~ 85°C	I			*	*	*	*	*	*
-40 ~ 85°C	J				*	*	*	*	*
-40 ~ 90°C	K					*	*	*	*
-40 ~ 105°C	L						*	*	*

## TABLE 2.

A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q
HC-49/U	HC-49/T	ATS-25/U	ATS-49/U	ATS-51/U	UM-1	UM-4	UM-5	SX-1	SX-3	SX-5	SX-7	SX-6	SX-8	SX-32	SX-22

## MECHANICAL DIMENSIONS

(mm)

