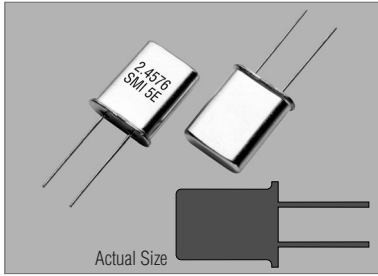
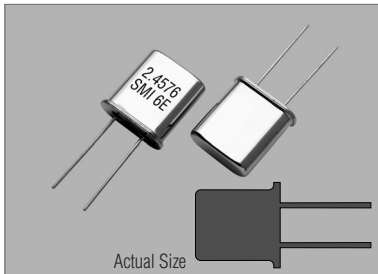


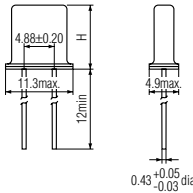
HC-49/U



HC-49/UT

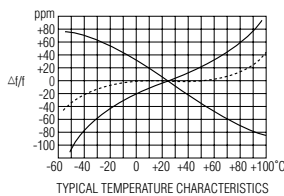


HC-49/U & HC-49/UT



Holder	H
HC-49/U	13.5mm max.
HC-49/UT	11.2mm max.

AT-CUT



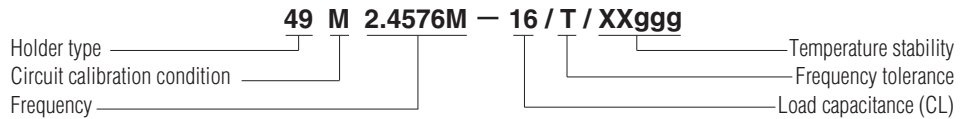
STANDARD SPECIFICATIONS

- Holder type HC-49/U & HC-49/UT
- Frequency range 1.84320 MHz to 200.000 MHz
- Frequency tolerance J : ±5 ppm at +25°C ±3°C
O : ±10 ppm at +25°C ±3°C
Q : ±15 ppm at +25°C ±3°C
R : ±20 ppm at +25°C ±3°C
T : ±30 ppm at +25°C ±3°C
X : ±50 ppm at +25°C ±3°C
- Temperature stability (referred to +25°C) XXggg : ±50 ppm over -10°C to +60°C
OOiii : ±10 ppm over -20°C to +70°C
QQiii : ±15 ppm over -20°C to +70°C
RRiii : ±20 ppm over -20°C to +70°C
TTiii : ±30 ppm over -20°C to +70°C
Note : Contact for other temperature stabilities and operating temperature ranges.
- Load capacitance (CL) 20 pF, Typical
- Equivalent series resistance (ESR) See table below

1.84320 MHz +	2.000 MHz +	2.500 MHz +	3.000 MHz +	3.500 MHz +	4.000 MHz +	4.500 MHz +
500 Ω max.	400 Ω max.	250 Ω max.	180 Ω max.	100 Ω max.	80 Ω max.	60 Ω max.
5.000 MHz +	6.000 MHz +	7.000 MHz +	9.000 MHz +	13.000 MHz +	20 to 120 MHz (3rd OT)	80 to 200 MHz (5th OT)
50 Ω max.	40 Ω max.	30 Ω max.	25 Ω max.	20 Ω max.	60 Ω max.	80 Ω max.

- Shunt capacitance (Co) 7 pF max.
- Drive level (P) 3 mW max.
- Aging ±5 ppm max. at +25°C ±3°C per year
- Cut AT-Cut

PART NUMBERING GUIDE



EXAMPLE

SMI PART NO.	Holder	Circuit Calibration Condition	Frequency
49M2.4576M-16/T/XXggg	49 = HC-49/U	M = Parallel resonance CL = 16 pF	2.4576 MHz
49M9.84375M-20/Q/TTiii	49 = HC-49/U	M = Parallel resonance CL = 20 pF	9.84375 MHz
49TS19.6608M/O/QQiii	49T = HC-49/UT	S = Series resonance	19.6608 MHz

Frequency Tolerance	Temperature Stability
T = ±30 ppm	XXggg = ±50 ppm
Q = ±15 ppm	TTiii = ±30 ppm
O = ±10 ppm	QQiii = ±15 ppm

PACKAGE DATA

Item	Package	HC-49/U HC-49/UT
Cover		Metal
Base		Metal
Sealing		Resistance
Terminal lead		Alloy (FeNiCo)
Terminal lead plating		SnCu
RoHS		Compliant (Pb-free)