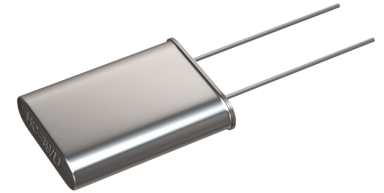


THT QUARTZ CRYSTAL SERIES HC-49/U

SERIES HC-49/U

FEATURES

- + High reliability for low cost
- + Extended temperature range to -40/+125°C available
- + Excellent clock generator for CPU's, Wireless
- + Designed for the use in wireless, communication, automotive, etc.



PB FREE / ROHS COMPLIANT

GENERAL DATA

PARAMETERS	PRODUCT FEATURES AND CONDITIONS
THT-CRYSTAL SERIES	HC-49/U
NUMBER OF SOLDER PINS	HC-49/U = 2 leads (standard) HC-49/3U = 3 leads (optional)
PACKAGE HEIGHT	13.46 mm (standard) 10.7 mm (optional)
FREQUENCY RANGE	1.8432 ~ 40.0 MHz AT-Fundamental 20.0 ~ 40.0 MHz BT-Fundamental 23.0 ~ 100.0 MHz 3rd Overtone 60.0 ~ 150.0 MHz 5 th Overtone 120.0 ~ 200.0 MHz 7 th Overtone
FREQUENCY TOLERANCES AT 25°C	±10 ppm ~ ±50 ppm
LOAD CAPACITANCE (C _L)	6 pF ~ 50 pF or Series
WORKING TEMPERATURE RANGES	0/+50°C ~ -40/+125°C
SHUNT CAPACITANCE (C ₀)	7 pF max.
DRIVE LEVEL	100 µW typical (0.01 mW ~ 1 mW possible on request)
AGING	±3 ~ ±5 ppm per year standard (±2 ppm available as option)
INSULATION RESISTANCE	>500 MΩ DC/100V ±10%
STORAGE TEMPERATURE	-55°/+125°C
DELIVERY FORM	Bulks standard
OPTIONS	Insulator Cutted leads
SELECT YOUR REQUIRED CRYSTAL (PRODUCT CONFIGURATOR)	REQUEST CRYSTAL SAMPLES (SAMPLE CONFIGURATOR)

FREQUENCY STABILITY VS. TEMPERATURE

	±5ppm	±10ppm	±15ppm	±20ppm	±30ppm	±50ppm	±100ppm
0°/+50°C	+	+	+	+	+	+	+
-10°/+60°C	+	+	+	+	+	+	+
0°/+70°C	+	+	+	+	+	+	+
-20°/+70°C	+	+	+	+	+	+	+
-40°/+85°C			+	+	+	+	+
-40°/+125°C						+	+

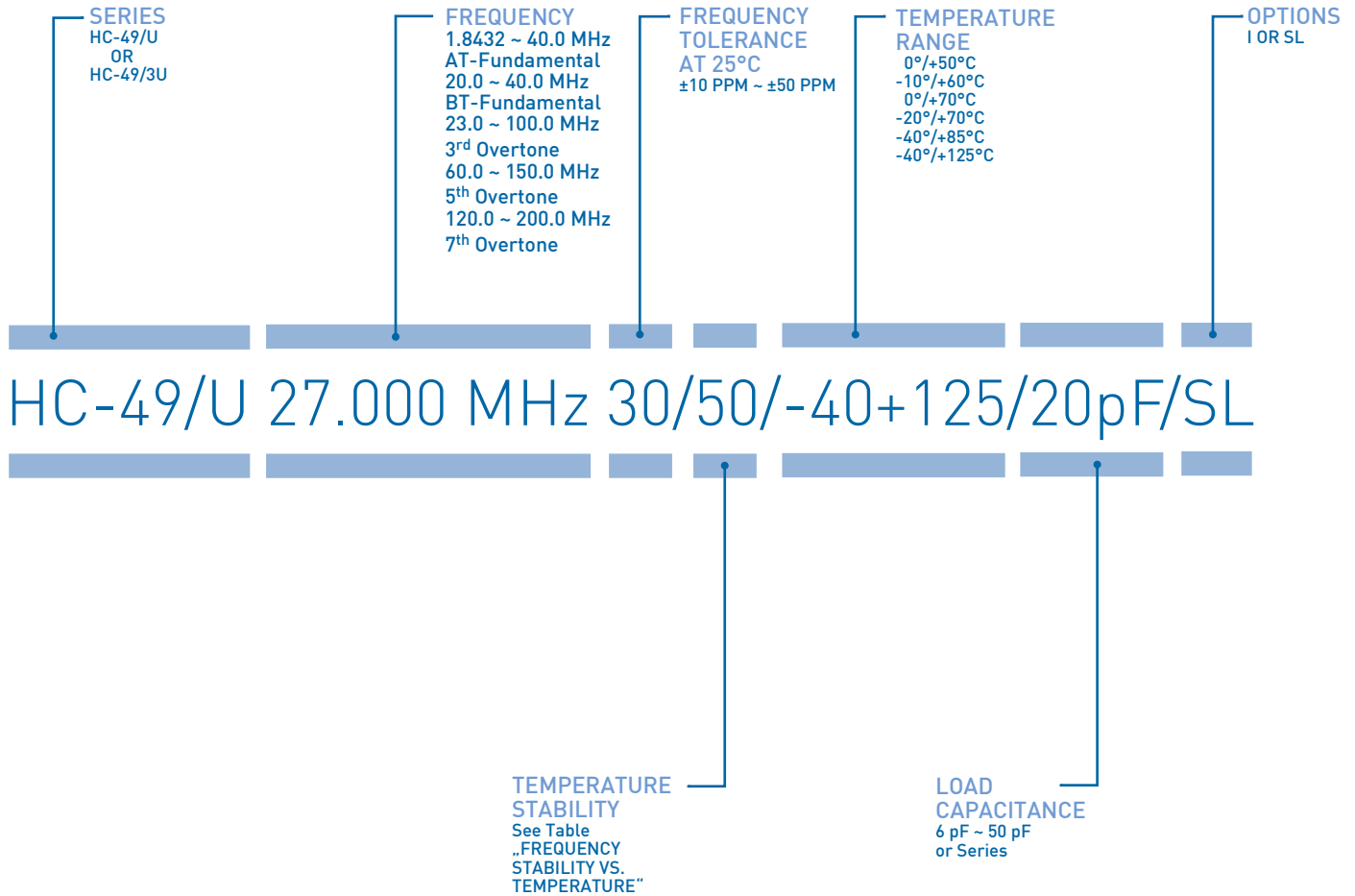
DIMENSIONS



RESONANCE RESISTANCE

FREQUENCY IN MHz	VIBRATION MODE	ESR MAX. IN Ω
3.5 ~ 3.79 MHz	AT Fund.	120
3.9 ~ 4.99 MHz	AT Fund.	100
4.5 ~ 5.99 MHz	AT Fund.	90
6.0 ~ 6.99 MHz	AT Fund.	70
7.0 ~ 7.99 MHz	AT Fund.	70
8.0 ~ 8.99 MHz	AT Fund.	60
9.0 ~ 9.99 MHz	AT Fund.	60
10.0 ~ 11.99 MHz	AT Fund.	50
12.0 ~ 19.99 MHz	AT Fund.	40
20.0 ~ 26.99 MHz	AT Fund.	30
27.0 ~ 40.00 MHz	AT Fund.	25
27.0 ~ 40.00 MHz	3rd OT AT	100
40.0 ~ 40.00 MHz	3rd OT AT	60

ORDERING INFORMATION



EXAMPLE: HC-49/U 27.000 MHz 30/50/-40+125/20pF/SL

PLEASE INDICATE YOUR REQUIRED PARAMETERS

ADDITIONAL INFORMATION ON OPTIONS

OPTIONS FOR THT

BLANK	= No options
I	= Insulator (for 2+3 lead housing)
SL	= Short leads (only for 2 lead housing)

REMARK: OPTIONS COMBINATIONS

I+SL	= can be combined
SL	= can not be delivered in tape and in reel

REVISION HISTORY^[1]

VERSION	RELEASE DATE	AMENDMENTS SUMMARY
01	May 2017	<ul style="list-style-type: none"> + Revised tape and reel options + Deleted reel specification + Revised ordering information + Revised tape and reel options

Note:

1. Based on Datasheet version from April 2015/SPEC 01/REV.00



PREMIUM QUALITY BY PETERMANN-TECHNIK



OUR COMPANY IS CERTIFIED ACCORDING TO ISO 9001:2015 IN OCTOBER 2016 BY THE DMSZ CERTIFIKATION GMBH.

THIS IS FOR YOU TO ENSURE THAT THE PRINCIPLES OF QUALITY MANAGEMENT ARE FULLY IMPLEMENTED IN OUR QUALITY MANAGEMENT SYSTEM AND QUALITY CONTROL METHODS ALSO DOMINATE OUR QUALITY STANDARDS.