HUS & HUSL CRYSTALS

- **Low-profile version of industry-standard HC49**
- **Available as HUS (3.5mm height) and HUSL (2.5mm height)**
- **low cost and light weight**
- **High frequency fundamental mode is available in BT-Cut**

DESCRIPTION

HUS crystals share the same base outline as the industry-standard HC49 crystal. The crystal uses at AT-cut strip crystal with an hermetically sealed can. HUS crystals provide a low cost source of system clock frequency.

SPECIFICATION

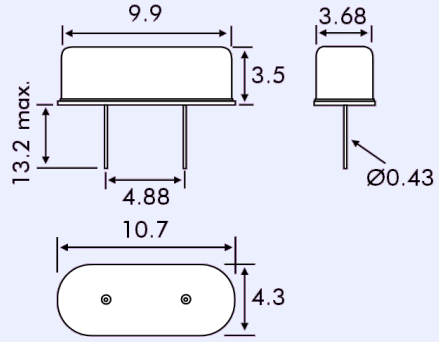
Frequency Range:	3.2MHz to 70.0MHz
Oscillation Mode	
AT-Cut Fundamental:	3.2MHz to 48.0MHz
BT-Cut Fundamental:	24.0MHz to 48.0MHz
AT-Cut 3rd Overtone:	27.0MHz to 70.0MHz
Calibration Tolerance at 25°C	
AT-Cut:	±5, ±10, ±20 or ±30ppm
Frequency Stability:	*See table*
Load Capacitance (CL):	Series or from 8pF to 32pF
Ageing at 25°C:	±3ppm maximum, 1st year, ±1ppm per year thereafter.
Drive Level:	100µWatts typ., 500µWatts max.
Storage Temperature Range:	-50° to +105°C
Crystal Holder:	Resistance-weld hermetic seal
RoHS Status:	RoHS Compliant and pB free
Supply format:	Bulk pack

ESR and OSCILLATION MODE

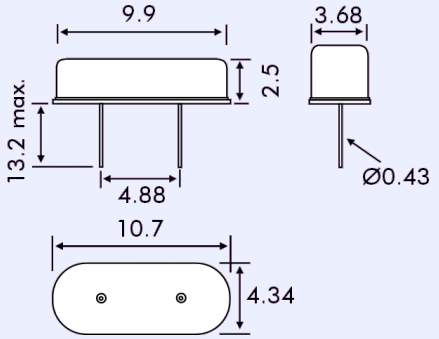
Frequency Range MHz	Crystal Cut/ Oscill. Mode	ESR Ω Max.
3.2 ~ 3.4	AT-Fund	300
3.5 ~ 6.0	AT-Fund	120
6.1 ~ 10.0	AT-Fund	60
10.1 ~ 30.0	AT-Fund	40
24.0 ~ 48.0	BT-Fund	40
27.0 ~ 30.0	AT-3rd OT	150
30.1 ~ 50.0	AT-3rd OT	100
50.1 ~ 70.0	AT-3rd OT	80

OUTLINE & DIMENSIONS

HUS



HUSL



PART NUMBER FORMAT

Example: HUS - 3.6864 - 12 - 30/50/-20+70/100R

Package
HUS or HUSL

Frequency in MHz

Load Capacitance
(Either SR for series or CL in pF)

Calibration tolerance
at 25°C (±ppm)

Temperature Stability
over temp. range (±ppm)

Operating Temp. Range (°C)
(Lower and upper limits)

Equivalent Series Resistance
(Optional - use when special value is required)

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