

FEATURES

- Low cost crystal for mass market applications
- Surface mount version of HC49-4H crystal
- Comprehensie stockholding of standard frequencies
- Customized parts readily available
- Industry-standard package
- Low-profile versions available

DESCRIPTION

49USMX crystals are low profile surface mount crystals that have the same footprint as standard HC49 or HC49-4H crystals. 49USMD crystals are ideal for use in low cost, mass-market applications but are also able to be produced to close tolerances when required.

SPECIFICATION

Packaging:

RoHS Status:

Frequency Range: 3.2MHz to 70MHz ±30ppm at 25°C standard Calibration Tolerance: ±10ppm available Frequency Stability over Temp. AT-Cut: ± 30 ppm over $-10^{\circ} \sim +60^{\circ*}$ ± 100 ppm over $-10^{\circ} \sim +60^{\circ}$ C* BT-Cut: Operating Temperature Range: -10° ~ +60°C to -40° ~ +85°C 4pf typical, 7pF maximum Shunt Capacitance (C0): Load Capacitance (CL): Series or from 8pF to 32pF (Customer specified) Ageing: ±3ppm maximum in first year ±1ppm per year thereafter (Ta = 25°C, drive $100\mu W$) Drive Level: 100μW typical, 500μW maximum Reflow Soldering: 260°C, 10s maximum Holder: Hermetic seal, resistance weld

EIA 24mm tape and reel

1000 pieces per reel

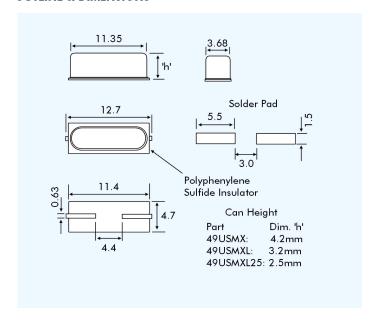
Compliant

49SMD Standard and Low Profile





OUTLINE & DIMENSIONS



EQUIVALENT SERIES RESISTANCE

Frequency	Crystal Cut/	ESR
Range MHz	Mode	Ohms Max.
3.2~3.4	AT-Fund.	300
3.5~4.0	AT-Fund.	150
4.1~4.9	AT-Fund.	120
5.0~5.9	AT-Fund.	100
6.0~8.9	AT-Fund.	80
9.0~9.9	AT-Fund.	60
10.0~12.9	AT-Fund.	50
13.0~24.0	AT-Fund.	45
24.1~30.0	AT-Fund.	40
24.0~48.0	BT-Fund.	40
27.0~30.0	AT-3rd OT	150
30.0~50.0	AT-3rd OT	100
50.1~70.0	AT-3rd OT	80

PART NUMBER GENERATION

