

- Frequency range 3.5MHz to 70.0MHz
- Fully RoHS compliant
- Industry-standard package
- Standard EIA tape and reel supply



### DESCRIPTION

86SMX crystals were among the first surface mount crystal designs available in the industry. As a result the package is widely used. Supply on 24mm EIA tape and reel is standard.

### SPECIFICATION

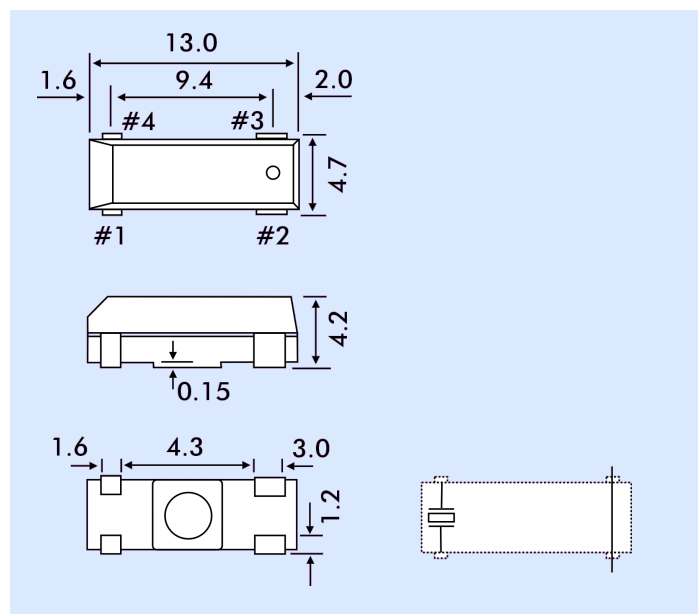
Frequency Range	
AT-Cut Fundamental:	3.5MHz to 30.0MHz
AT-Cut 3rd Overtone:	30.1MHz to 70.0MHz
BT-Cut Fundamental:	25.0MHz to 40.0MHz
Calibration Tolerance at 25°C*:	±50ppm at 25°C
Frequency Stability over Temperature*	
AT-Cut:	±50ppm over -10° to +60°C
BT-Cut:	±100ppm over -10° to +60°C
Storage Temperature:	-40°~+85°C
Equivalent Series Resistance:	See table
Shunt Capacitance (C0):	7pF maximum
Load Capacitance (CL):	Series or from 8pF to 32pF (Customer specified CL)
Ageing:	±3ppm per year at +25°C
Drive level:	100µW maximum
Reflow Soldering:	10s maximum at 260°C twice or 180s at 230°C, once.
Crystal Holder:	Moulded plastic
Packaging:	24mm EIA tape and reel, 1k per reel.

Note: Tighter calibration tolerance and operating temperature range parts may be available, check with Euroquartz sales.

### EQUIVALENT SERIES RESISTANCE / OSCILLATION MODE

Frequency Range MHz	Crystal Cut/ Osc. Mode	ESR (Ω) Max.
3.5 ~ 3.99	AT Fund	200
4.0 ~ 4.99	AT Fund	150
5.0 ~ 5.99	AT Fund	120
6.0 ~ 6.99	AT Fund	100
7.0 ~ 7.99	AT Fund	80
8.0 ~ 12.9	AT Fund	60
13.0 ~ 30.0	AT Fund	40
25.1 ~ 45.0	BT Fund	40
30.0 ~ 70.0	AT 3rd OT	100

### OUTLINE & DIMENSIONS



### PART NUMBER GENERATION

Part numbers for 86SMX crystals are generated as follows:

