

■ Features

- RoHS compliant and lead-free product
- Light weight and compact. Ideal for consumer portable devices
- The whole package is grounded via the topmetal lid and the two bottom pads .
- Frequency tolerance as tight as ± 5 ppm is available.



General Specifications

Item / Type	MJ series (5.0 * 3.2 * 0.9 mm)
Frequency Range & Crystal Cut	10.000 ~ 50.000 MHz , AT-cut , Fundamental Mode (see Table 1)
	40.000 ~ 125.000 MHz , AT-cut , 3rd overtone (see Table 1)
	note: Frequencies between 40 and 50 MHz can be either AT fundamental or AT 3rd overtone. To avoid mistake, please add "AF" after the frequency on part number for AT-cut fundamental mode. "A3" for AT-cut 3rd overtone. For example: MJ-40.000 AF -20P.
Load Capacitance	Series Resonance or Parallel (8 to 32 pF typical)
Drive Level	10 μ W (100 μ W max.)
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25°C
Frequency Stability	See Table 2
Aging	$\Delta F / F : \pm 3$ ppm / year (max.)
Storage Temperature Range	- 50°C to 105°C

Table 1
Series Resistance (max.)

Frequency	Oscillator Mode	E. S. R.
10.000 ~ 50.000 MHz	AT-Cut , Fund. Mode	50 Ω max
40.000 ~ 125.000 MHz	AT-Cut , 3rd Overtone	80 Ω max

Table 2
Frequency stability Vs Operating temperature range

Temp. (°C) \ ppm		± 5	± 10	± 15	± 20	± 25	± 30
X	-10 to 60°C	○	○	○	○	○	○
Y	-20 to 70°C	▲	○	○	○	○	○
I	-40 to 85°C			○	○	○	○

○ : available ; ▲ : contact Mercury

Outline Dimensions (Unit : mm)

