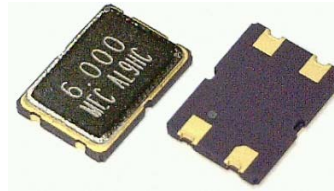


SMD type
7.0 x 5.0 x 1.2 mm



Applications

- 1.2 mm height. Ideal for space-constrained applications such as PCMCIA
- A ceramic package with a seam sealed kovar lid.
- The whole package can be grounded via the top metal lid and the two bottom pads .

General Specifications	
Parameters	Electrical Spec.
Item / Type	MQ series (7.0 * 5.0 * 1.2 mm)
Frequency Range & Crystal Cut	6.000 ~ 50.000 MHz , AT-cut , Fundamental Mode (see Table 1) 30.000 ~ 200.000 MHz , AT-cut , 3rd overtone (see Table 1)
Load Capacitance	Series or Parallel (8 to 32 pF) resonance
Drive Level	10μ W typical (100μ W max.)
Frequency Tolerance	± 5 ppm , ± 10 ppm , ± 20 ppm or ± 30 ppm at 25°C
Frequency Stability	See Table 2
Aging	ΔF / F : ±3 ppm / year (max.)
Storage Temperature Range	- 50°C to 105°C

Table 1

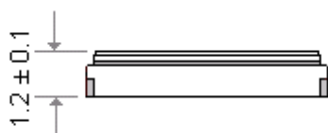
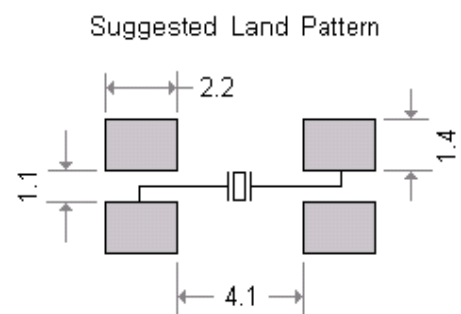
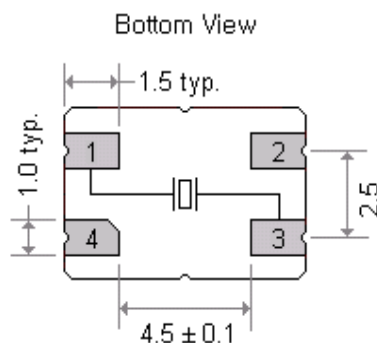
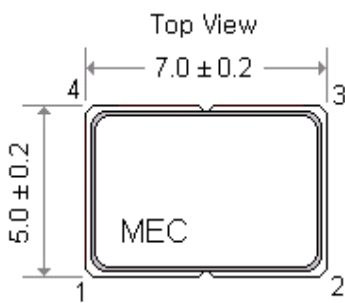
ESR (Equivalent Series Resistance)					
Freq.(MHz)	Osc. Mode	E.S.R.	Freq.(MHz)	Osc. Mode	E.S.R.
6.0 ~ 8.0	AT , Fund.	80 Ω	30.0~ 40.0	AT , 3rd	100 Ω
8.1 ~ 11.0	AT , Fund.	60 Ω	40.1~ 50.0	AT , 3rd	80 Ω
11.1~ 14.0	AT , Fund.	50 Ω	50.1~200.0	AT , 3rd	90 Ω
14.1~ 50.0	AT , Fund.	40 Ω			

Table 2

Frequency stability Vs Operating temperature range							
Stability code	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

General Specifications (Unit : mm)



Pad connections :
Pad 1 and 3 : Crystal
Pad 2 and 4 : Connected throught the metal lid for grounding
Chamfered pad is pad No.4

Mercury www.mercury-crystal.com