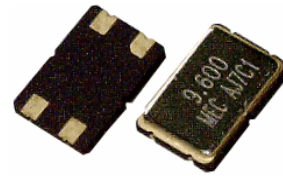


■ Features

- RoHS compliant and lead-free product
- 1.2 mm height. Ideal for space constraint applications such as PCMCIA
- Ceramic package with seam sealed kovar lid.
- The whole package is grounded via the topmetal lid and the two bottom pads .



General Specifications

| 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 ~ 125.000 MHz , AT-cut , 3rd overtone (see Table 1) |
| Load Capacitance | Series Resonance or Parallel (8 to 32 pF typical) |
| Drive Level | 10μ W (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
Series Resistance (max.)

| 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 |
| 8.0 ~ 11.0 | AT , Fund. | 60 Ω | 40.1~ 50.0 | AT , 3rd | 80 Ω |
| 11.1~ 14.0 | AT , Fund. | 50 Ω | 50.1~125.0 | AT , 3rd | 90 Ω |
| 14.1~ 50.0 | AT , Fund. | 40 Ω | | | |

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)

