



Features

Tight Frequency Tolerance
Small Size
High Performance to Cost Ratio
Excellent Aging Characteristics



Specifications

| Type | | Φ2×6, Φ3×8, Φ3×9, Φ3×10 |
|--|--|---|
| 频率范围 Frequency Range(MHz) | | 4.000~60.000MHz |
| 振动模式 Vibration Mode | | AT cut, Fundamental, 3 rd Overtone |
| 调整频差 (ppm) Frequency Tolerance (at 25°C) | | ±5 ~ ±50ppm |
| 温度频差 (ppm) Frequency Stability Over Temperature Range | | See Table 1 |
| 储存温度 (°C) Storage Temperature Range | | -40°C ~ +85°C |
| 等效电阻 (Ω) Equivalent Series Resistance | | See Table 2 |
| 静态电容 (pF) Shunt Capacitance | | 5.0 pF Max |
| 负载电容 (pF) Load Capacitance | | 5-50pF or Series Resonance |
| 绝缘电阻 (MΩ) Insulation Resistance | | ≥500MΩ//DC100V ± 10V |
| 激励功率 (μW) Drive Level | | 0.01 μW ~ 1000 μW |
| 老化率 (ppm/y) Aging | | ±5ppm/year |

All specifications subject change without notice.

Frequency Stability over Temperature Range (AT cut) (Table 1)

| Temperature Range | | ±3ppm | ±5ppm | ±7ppm | ±10ppm | ±15ppm | ±20ppm | ±30ppm | ±50ppm |
|-------------------|---|-------|-------|-------|--------|--------|--------|--------|--------|
| | | 03 | 05 | 07 | 10 | 15 | 20 | 30 | 50 |
| 0~+50°C | A | △ | △ | △ | △ | △ | △ | △ | △ |
| -5~+55°C | B | △ | △ | △ | △ | △ | △ | △ | △ |
| -10~+60°C | C | △ | △ | △ | △ | △ | △ | △ | △ |
| -20~+70°C | D | △ | △ | △ | △ | △ | △ | △ | △ |
| -30~+85°C | E | / | / | / | △ | △ | △ | △ | △ |
| -40~+85°C | F | / | / | / | / | △ | △ | △ | △ |

MHz Cylinder Type Crystal (AT-206,AT-308,AT-309,AT-310)

■ Equivalent Series Resistance (ESR) (Table 2)

| Freq. Range (MHz) | Mode of Oscillation | ESR (Ω Max) |
|-------------------|--------------------------|---------------------|
| 4.000~5.999 | AT. Fund | 150 |
| 6.000~9.999 | AT. Fund | 100 |
| 10.000~40.000 | AT. Fund | 60 |
| 41.000~60.000 | 3 rd Overtone | 80 |

■ Option Available

| Options Available | Item |
|-------------------|---|
| V | Paper tape & reel packing/ammo packing |
| V | Lead cut/customer lead length options available |
| V | Vinyl sleeve on crystal cover |
| V | Special ESR |
| V | Gull wing option |

■ Dimension (Unit: mm)

