



## 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 <sup>rd</sup> 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 ( $\Omega$ 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 <sup>rd</sup> Overtone	80

## ■ Optiosn 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)

