

Features

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



Specifications

Type		$\Phi 2 \times 6, \Phi 3 \times 8, \Phi 3 \times 9, \Phi 3 \times 10$
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)	$\pm 5 \sim \pm 50\text{ppm}$
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	$\geq 500\text{M}\Omega // \text{DC}100\text{V} \pm 10\text{V}$
激励功率 (μW)	Drive Level	0.01 μW~1000 μW
老化率 (ppm/y)	Aging	$\pm 5\text{ppm/year}$

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

■ Options 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)

