

## Features

- ★ High- Stability
- ★ Small package
- ★ Excellent environmental capability
- ★ time keep clock signal
- ★ Suitable for small Telecommunication equipment

## Applications

- ★ Watch and Clock
- ★ Telecommunication equipment
- ★ Remote Control
- ★ Consumer Electronics



## Dimension (Unit: mm)

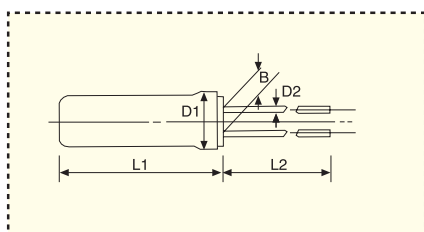


Table 1

Type	L1	L2	D1	D2	B
3x8	8.3	10.0	Ø3.1	Ø0.3	0.8
3x9	9.3	10.0	Ø3.1	Ø0.3	1.1
3x10	10.3	10.0	Ø3.1	Ø0.3	1.1

## Equivalent Series Resistance

Frequency (MHz)	ESR Max (Ω)	Frequency (MHz)	ESR Max (Ω)
3.597- 4.99	120	10.0 - 11.99	70
4.5 - 4.99	110	12 - 13.99	60
5.0 - 6.99	100	14 - 15.99	40
7.0 - 9.99	80	16 - 27.0	20

## Specifications (Characteristics)

Item	Symbol	Specification
Frequency Range	f	3.579 ~ 27.00MHz
Frequency Tolerance at 25°C	$\Delta f/f$	±15 ppm ±30 ppm ★ ±50 ppm
Frequency Stability (-10°C ~ +60°C)	$\Delta f/f$	±30 ppm ★ ±50 ppm
Load Capacitance	CL	16.0pF Typical
Operating Temp. Range	Topr	-20°C ~ +70°C
Storage Temp. Range	Tstg	-30°C ~ +80°C
Resistance of Series Resonance	Rs	See Table 1
Drive Level	PWR	10 ~ 50μW
Shunt Capacitance	C0	5.0pF Max.
Insulation Resistance	IR	500MΩ at DC100 V
Aging Level	Fa	±5.0ppm/yr Max @ 25°C
Packing		Bulk 100pcs per polybags, 500pcs per inner box, 10,000 pcs per export carton

★ Commonly used

## Part Number and Ordering

Part Number Code	Holder Type + Vibration Mode + Frequency + Tolerance/Stability + RS + CL
Ordering Code	Same as Above
Example	AT309-AF-10M-30/30-70Ω-20P

## At-39 Common Use Frequency

Application	Standard Frequency(MHz)	Application	Standard Frequency(MHz)
Timepiece	3.579545/ 4.194	Telecom	12.000
Calculator	4.000 /16.000	Remote Control	12.000
PABX	4.096/ 16.384/ 16.896	Electronic Music	16.000
Computer	3.579545/ 6.000	Pager	4.915 /17.445/ 18.35/ 20.945/ 21.855
Electronic Scale	8.388		
Magnetic card	10.059		