

## HIGH FREQUENCY MINIATURE CRYSTAL UNITS

### AT26 & AT39 Series

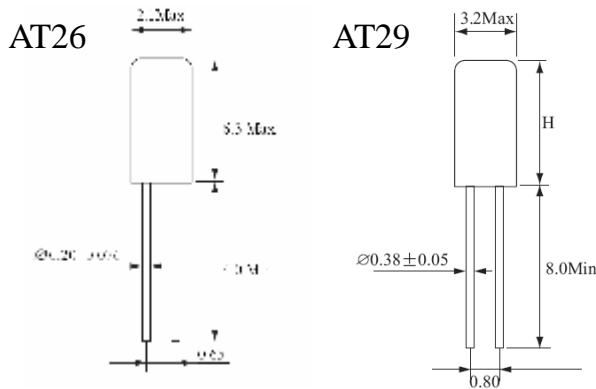
#### Electrical Specifications

Parameter	Symb	Condition	Min	Typ	Max	Units
Frequency Range	F <sub>0</sub>		3.579545		70	MHz
Frequency Tolerance	ΔF/ F <sub>0</sub>	AT 25°C	±20	±30	±50	ppm
Temperature Stability	TC	REF TO 25°C	±20	±30	±50	ppm
Operating Temperature Range	T <sub>OPR</sub>		-10		+60	°C
Storage Temperature Range	T <sub>STG</sub>		-40		+85	°C
Shunt Capacitance	C <sub>0</sub>				7	pF
Load Capacitance	CL	Customer Specified	10	16	Series	pF
Insulator Resistance	IR	100V <sub>DC</sub>	500			MΩ
Drive Level	DL			100	500	μW
Aging(First year)	F <sub>a</sub>	AT 25°C	-5.0		+5.0	ppm

#### Equivalent Series Resistance(ESR) and Mode of Vibration(Mode)

Frequency Range(MHz)	Max ESR(Ω)	Mode	Frequency Range(MHz)	Max ESR(Ω)	Mode
3.579545 to 3.999	200	Fundamental	9.000 to 12.999	60	Fundamental
4.000 to 4.999	150	Fundamental	13.000 to 15.999	50	Fundamental
5.000 to 5.999	120	Fundamental	16.000 to 19.999	40	Fundamental
6.000 to 6.999	100	Fundamental	20.000 to 29.999	30	Fundamental
7.000 to 8.999	80	Fundamental	30.000 to 70.000	100	3 <sup>rd</sup> Overtone

#### Mechanical Dimensions(mm)



Frequency ≤ 4MHz H:10.5Max

Frequency > 4MHz H:9.0Max

AT39-A20C18-32K768

Package	Frequency Stability	Frequency Tolerance	Operating temperature Range	Load Capacitance	Nominal Frequency (In MHz)
HC49U	A=±10ppm	10=±10ppm	A=0 to +70°C	00=series	25M000=25.000MHz
HC49S	B=±20ppm	20=±20ppm	B=-20 to +70°C	10=10pF	32K768=32.768KHz
AT26	C=±30ppm	30=±30ppm	C=-40 to +85°C	18=18pF	
AT39	D=±50ppm	50=±50ppm	D=-40 to +105°C	32=32pF	
UM1	E=±100ppm	100=±100ppm			
UM5					

Through Hole Crystal Units Part Numbering System