

# **Quartz Crystal Unit**

## AT-26,AT-38,AT-39,AT-310 Series : Cylinder Quartz Crystal

#### 3.500 - 70.000MHz

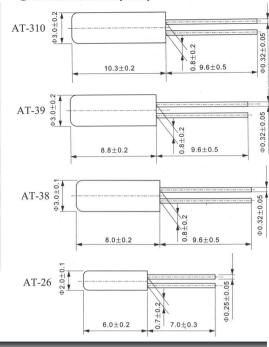
#### SPECIFICATION

Туре	AT-26	AT-38	AT-39	AT-310	
Frequency Range	12.000-30.000MHz	4.001 - 34.000MHz (Fund) 27.000 - 70.000MHz (3rd) 3.500-4.0			
Frequency Tolerance	±30PPM				
Frequency Stability	±30PPM or ±50PPM				
Operating Temperature	-10 ~ +70°C ( Typical)				
Storage Temperature	-40 ~ +85°C				
Series Resistance	Refer to table as below(AT-26)120Ω max				
Load Capacitance	12pF,16pF,20pF,32pF				
Shunt Capacitance	5pF max				
Drive Level	100μW max				
Aging	±5PPM nax				
Insulation Resistance	500MΩ min				

Soldering the body of the cylinder type crystal units with PCB must be avoided due to deteriorate the characteristics or damage the products.

Rubber adhesive is recommended.

#### DIMENSIONS(mm)



SM-AT26BSP

## SM-AT26BSP,SM-AT26SP,SM-AT38A,SM-AT39A,SM-AT310A Series: Cylinder SMD Quartz Crystal

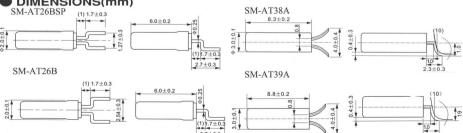
3.5000 - 70.000MHz

#### SPECIFICATION

Type	SM-AT26BSP	SM-AT26B	SM-AT38A	SM-AT39A	SM-AT310A	
Frequency Range	12.000-30.000MHz			3.500-4.000MHz		
Frequency Tolerance	±30PPM					
Frequency Stability	±30PPM or ±50PPM					
Operating Temperature	-10 ~ +70°C ( Typical)					
Storage Temperature	-40 ~ +85°C					
Series Resistance	Refer to table as below (SM-AT26BSP & SM-AT26B) 120Ω max					
Load Capacitance	12pF,16pF,20pF,32pF					
Shunt Capacitance	5pF max					
Drive Level	100μW max					
Aging	±5PPM nax					
Insulation Resistance	$500 \mathrm{M}\Omega~\mathrm{min}$					

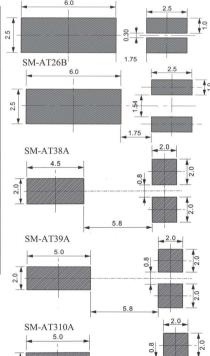
Soldering the body of the cylinder type crystal units with PCB must be avoided due to deteriorate the characteristics or damage the products.

# Rubber adhesive is recommended. DIMENSIONS(mm)



#### **©**EQUIVALENT SERIES RESISTANCE

Ferq. Range	3.500-4.000MHz	4.001-6.000MHz	6.001-10.000MHz	10.001-27.000MHz	27.001- 3	6.000MHz	36.001-70.000MHz
Mode	Fund.	Fund.	Fund.	Fund.	Fund.	3rd	3rd
E.S.R	150Ω max	120Ω max	80Ω max	50Ω max	30Ω max	100Ω max	80Ω max



2.			*
AT310A	4	6.3	-
0.3±0.2	0.3		(10)
4.0±0.4	0.4±0.3		10
			2.3±0.3