



ZHEJIANG A-CRYSTAL
ELECTRONIC TECHNOLOGY CO., LTD.



Issue	December 21, 2024
Rev.	1.0
Page	5

CRYSTAL UNIT SPECIFICATIONS

客户批准 Customer Approval

(请批准后回签一份 Please Return A Copy With Approval)

Customer	
Customer P/N	
Product	CRYSTAL RESONATORS
Spec	ATLF309/4.000~6.000M
A-Crystal P/N	AD4 Series

Drawn	Checked	Approved
<i>Caogaobang</i>	<i>Fengying</i>	<i>Tanglong</i>



ZHEJIANG A-CRYSTAL

ELECTRONIC TECHNOLOGY CO., LTD.



1. ELECTRICAL SPECIFICATIONS

1.1 Hold Type: ATLF309

No.	Item	Symb	Electrical Specification				Remark
			Min.	Type	Max.	Units	
1	Nominal Frequency	F0	4.000		6.000	MHz	
2	Mode of Vibration		■ Fundamental △3rd Overtone △5th Overtone				
3	Frequency Tolerance	$\Delta F/F0$	±10	±30	±50	ppm	at 25℃±3℃
4	Operating Temperature Range	T _{OPR}	-20 -40	-	+70 +85	℃	
5	Frequency Stability	T _c	±30		±50	ppm	
6	Storage Temperature	T _{STG}	-40	-	+85	℃	
7	Load capacitance	□L	6~specify			pF	
8	Equivalent Series Resistance	ESR	Seepage 1			Ω	
9	Drive Level	DL	-	100	200	μW	
10	Insulation Resistance	IR	500	-	-	MΩ	At 100V _{DC}
11	Shunt Capacitance	C ₀	-	-	5	pF	
12	Aging Per Year	Fa	-5	-	+5	ppm	First Year
13	Package type	Φ 3.0*9.0					

Seepage1

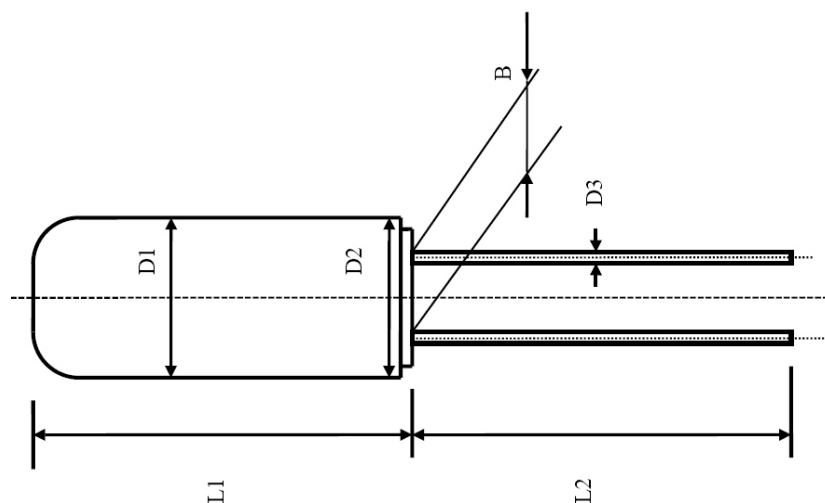
Frequency Range(MHz)	Mode of Vibration	ESR(Ω) Max
4.000≤F0<5.000	AT Fundamental	≤120
5.100≤F0<6.000	AT Fundamental	≤100



ZHEJIANG A-CRYSTAL
ELECTRONIC TECHNOLOGY CO., LTD.

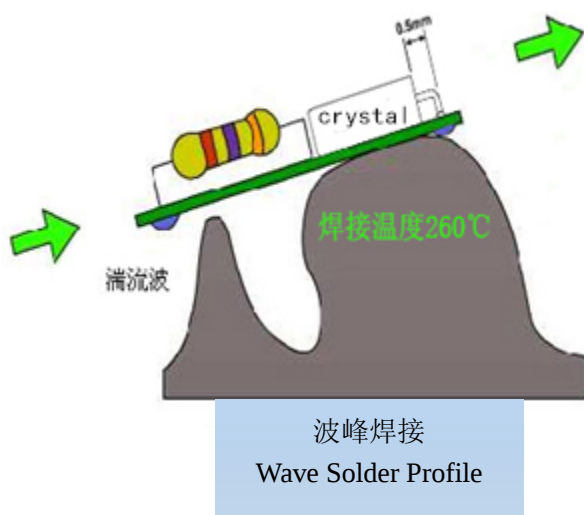


1.2 Dimension (Unit: mm)



型号/尺寸	L1	L2	D1	D2	D3	B
3*9	8.8□ax	8.0Min	2.95±0.1	3.0±0.1	0.3±0.05	0.8±0.05

1.3 The soldering requirements





ZHEJIANG A-CRYSTAL
ELECTRONIC TECHNOLOGY CO., LTD.



2. PACKING

2.1 Section of package

Package is made of corrugated paper with thickness of 0.8cm. Package has 10 inner boxes, each box has 10 bag

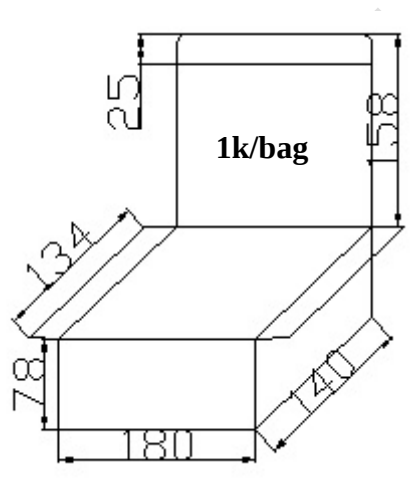
2.1.1 Quantity of package

Each bag 1000 pieces of Crystal Resonators

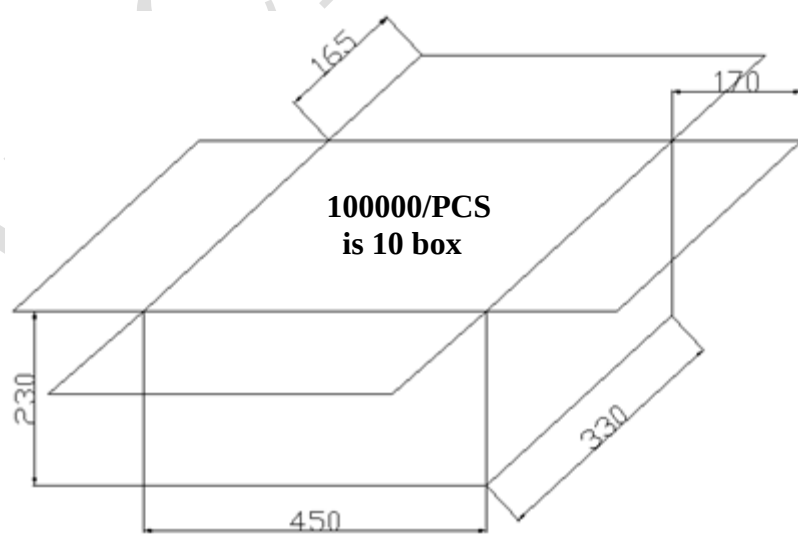
Per inner box 10 bag (1k/bag)

Per package 10 inner boxes & 10 inner boxes
 (100000 pieces of Crystal Resonators)

2.1.2 Inner Box Dimensions (Unit: mm)



2.1.3 Dimensions and Mark (Unit: mm)





ZHEJIANG A-CRYSTAL

ELECTRONIC TECHNOLOGY CO., LTD.



3. Products Code

3.1 DIP Crystal Resonators/MHz

公司代码 浙江一晶	产 品 型 号 (2 位)	工 作 频 率 (全频点位数)	负 载 电 容 (1 位字母)	调 整 频 差 (1 位字母)	温 度 频 差 (1 位字母)	工 作 温 度 (1 位字母)	其它
A-crystal Logo	Package	Nominal Frequency	Load Capacitance	Frequency Tolerating	Freq Temp Characteristics	Operating Temperture Range	Others
A	D4 (ATLF309)	8.000M	A = 12.5PF	01=5PPM	A=10PPM	1=0~50	Special
		12.000M	B = 10PF	02=10PPM	B=15PPM	2=-10~60	
			C = 9PF	03=20PPM	C=20PPM	3=-10~70	
			D = 8PF	04=30PPM	D=25PPM	4=-20~70	
			E = 7PF	05=40PPM	E=30PPM	5=-30~85	
			F = 6PF	06=50PPM	F=50PPM	6=-40~85	
			G = 16PF	07=100PPM	G=100PPM	7=-40~105	
			H = 18PF			8=-40~125	
			J = 20PF				
			K = 22PF				
			L = 30PF				