



Issue	December 21, 2024
Rev.	1.0
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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	PSX315A/32.768KHz
A-Crystal P/N	ASA Series

Drawn	Checked	Approved
<i>Caoqiaobang</i>	<i>Fengying</i>	<i>Tanqlong</i>



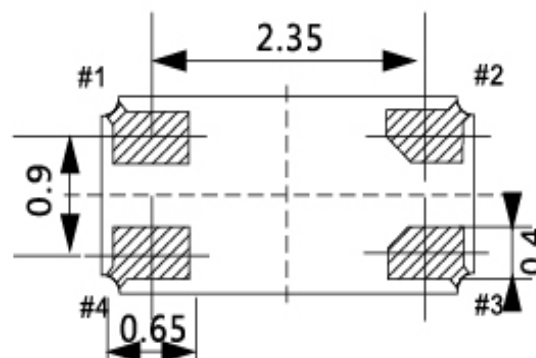
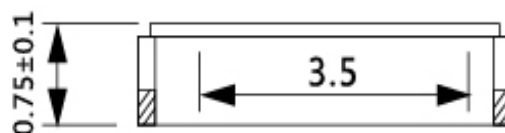
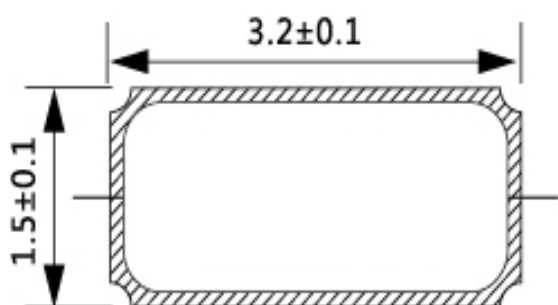
1. ELECTRICAL SPECIFICATIONS

1.1 Hold Type: PSX-315A

Parameter	Symb	Electrical Specification				Condition
		Min	Type	Max	Units	
Frequency Range	F ₀	-	32.768	-	KHz	
Frequency Tolerance	$\Delta f/f_0$	± 5	± 20	± 50	PPM	REF TO 25°C
Temperature Coefficient	K	$(-0.03 \pm 0.01) * 10^{-6}$			ppm/(°C) ²	
Turnover Temperature	T _{TO}	20	25	30	°C	
Operating Temperature Range	T _{OP}	-20 -40	-	+70 +85	°C	
Storage Temperature Range	T _{ST}	-55	-	125	°C	
Quality Factor	Q	10,000			Typ	
Series Resistance	R ₁	-	-	70	K Ω	REF TO 25°C
Shunt Capacitance	C ₀	-	1.3	-	Typ	7PF or less
Load Capacitance	C _L	4	-	12.5	PF	
Insulator Resistance	IR	500	-	-	M Ω	DC100V ± 15V
Drive Level	DL	-	0.1	0.5	μ W	
Capacitance ratio	R	-	450	-	TYP	
Aging Rate	Fa	± 3	-	± 5	PPM	at 25°C ± 3°C
Package type	3.2*1.5*0.9					

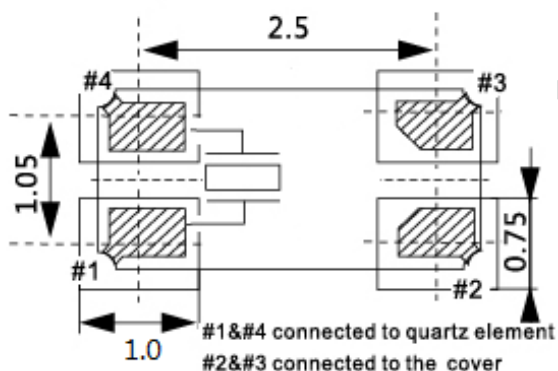


1.2 Dimension (Unit: mm)



Recommended Land Pattern

<Top View>



1.3 Marking



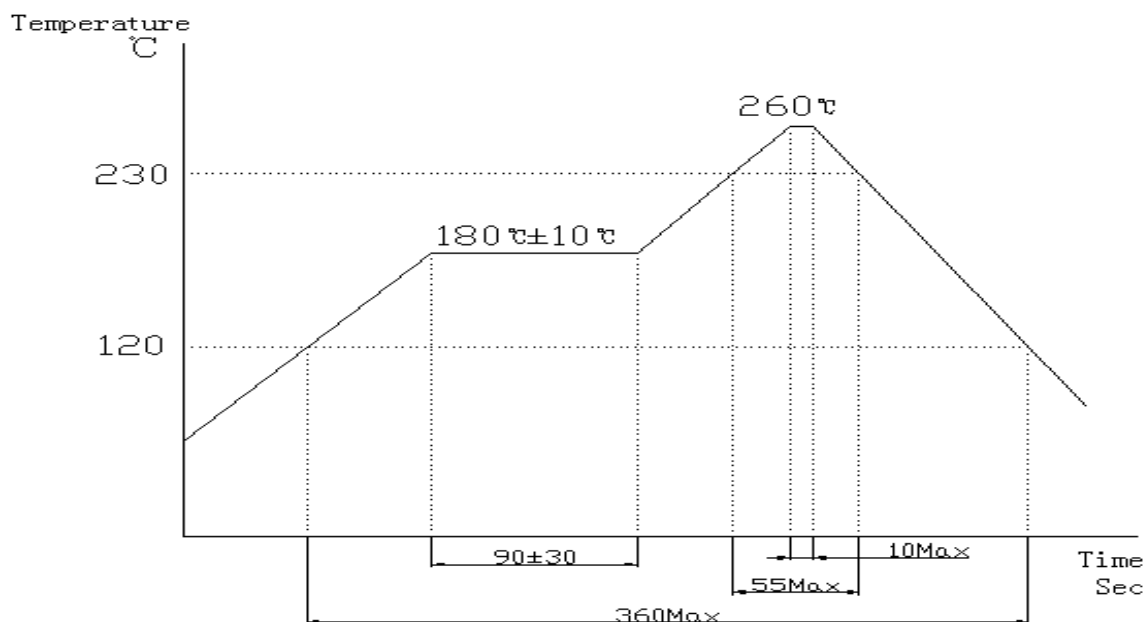
A: 32.768
Y: Year Code,
####: Lot No



Y: Year; E.g. "9" for 2019
M: Month Jan ~ Sep: 1-9, Oct: X Nov: Y Dec: Z.
###: Lot No

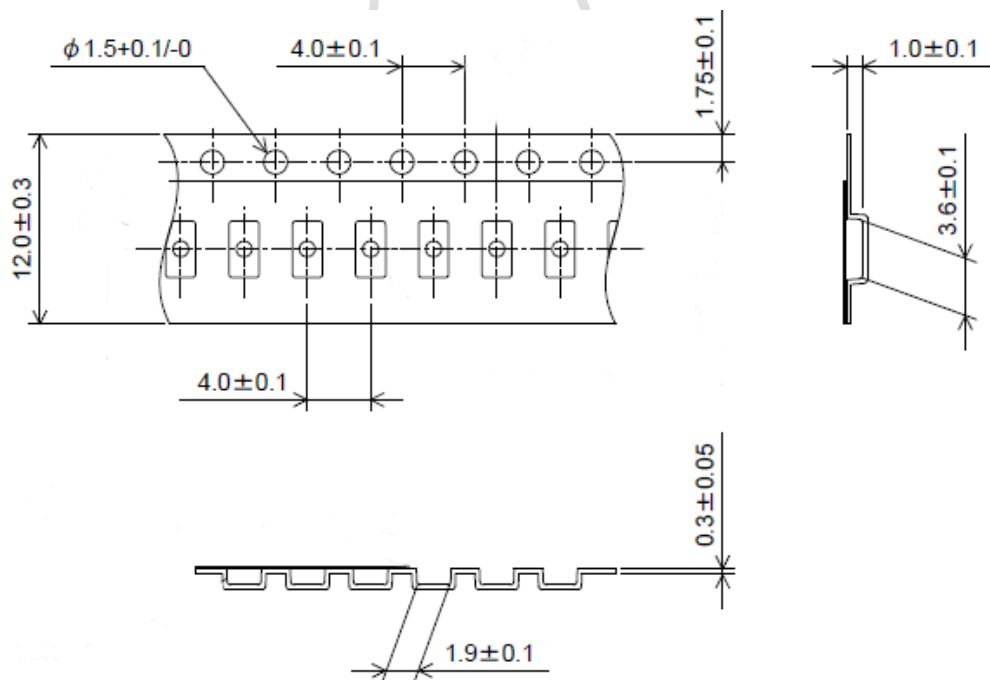


1.4 Reflow solder



2. Packing

2.1 Packing Method Sketch Map (Unit: mm)

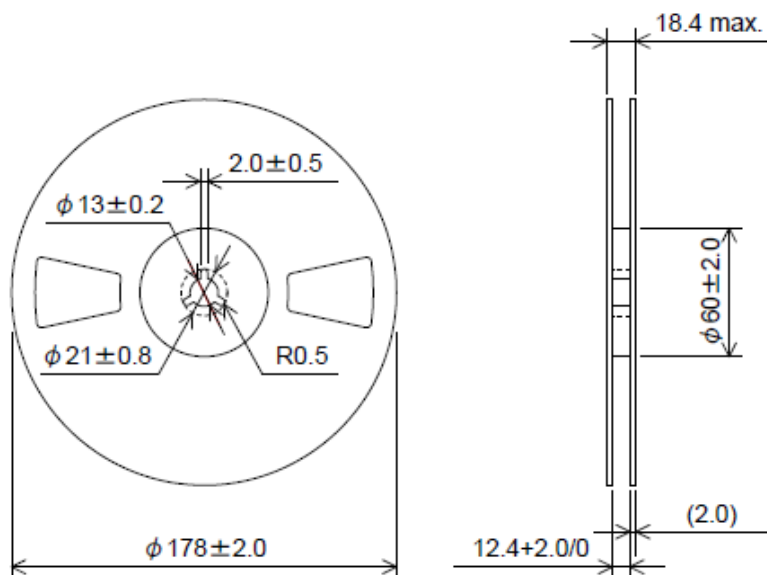




ZHEJIANG A-CRYSTAL
ELECTRONIC TECHNOLOGY CO., LTD.



2.2 Reel Dimensions (Unit: mm)



Pieces per reel: 3000/reel

3. Products Code

SMD Tuning Fork Crystal Resonators/KHz

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 Temperature Range	Others
A	SA (PSX315A)	32.768K	无穷大=000	01=5PPM	T=-0.034± 0.006ppm/(°C) ²	1=0~50	Special
			9PF=009	02=10PPM	A=10PPM	2=-10~60	
			12PF=012	03=20PPM	B=15PPM	3=-10~70	
			12.5PF=125	04=30PPM	C=20PPM	4=-20~70	
				05=40PPM	D=25PPM	5=-30~85	
				06=50PPM	E=30PPM	6=-40~85	
					F=50PPM	7=-40~105	
						8=-40~125	