



# APPROVAL SHEET

Customer Name : \_\_\_\_\_  
Customer P/N : \_\_\_\_\_  
Frequency : 32.768000 KHz  
Aker Approved P/N : D31N-032768-3-AL-00  
Aker MPN : D31N-032768-3-AL-00  
REVISION : A0  
ISSUED DATE : 2022/8/25

APPROVED	CHECKED	PREPARED
		
APPROVED BY CUSTOMER		

**AKER TECHNOLOGY CO., LTD.**

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**RoHS compliant**



Aker Approved P/N : D31N-032768-3-AL-00		
APPROVED	: Earnest	SHEET : 1 of 4
PREPARED	: Kiku	REV . : A0
Confidential		

Rev.	Date	Reviser	Revise contents
A0	2022/8/25	Kiku	Initial Released

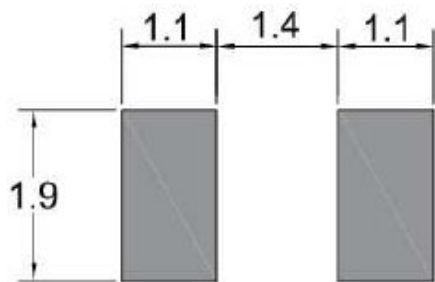
\*Please kindly be noted that AKER DO NOT guarantee parts quality which involves human security application.\*

## TUNING FORK CRYSTAL SPECIFICATION

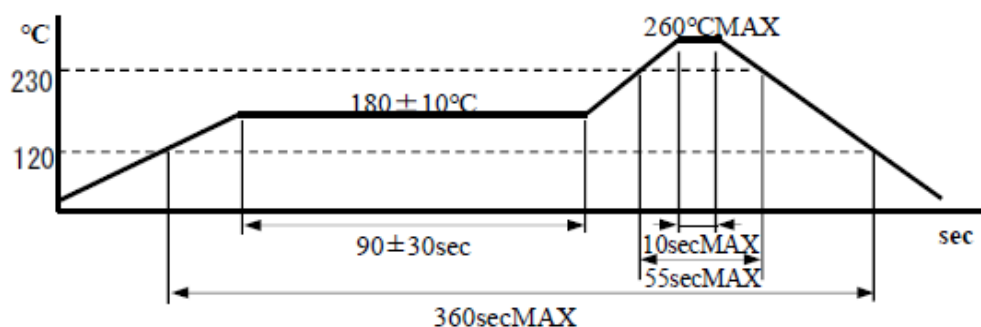
### 1 . ELECTRICAL CHARACTERISTICS

Nominal Frequency	32.768 kHz
Operating Temperature Range	-40 ~ +125 °C
Storage Temperature Range	-55 ~ +125 °C
Frequency Tolerance	±20ppm
Frequency Tolerance over Operating Temperature Range	Turnover Temp. ; $25 \pm 5$ °C Temp.Coefficient : $-0.034 \pm 0.006$ ppm/°C
Equivalent Series Resistance	90k $\Omega$ Max.
Insulation Resistance	500M $\Omega$ Min./DC100V $\pm 15$ V
Shunt Capacitance	0.95pF Typ
Load Capacitance	12.5pF This Load Capacitance has been fixed on customer's request.
Level of Drive	1 $\mu$ W Max.

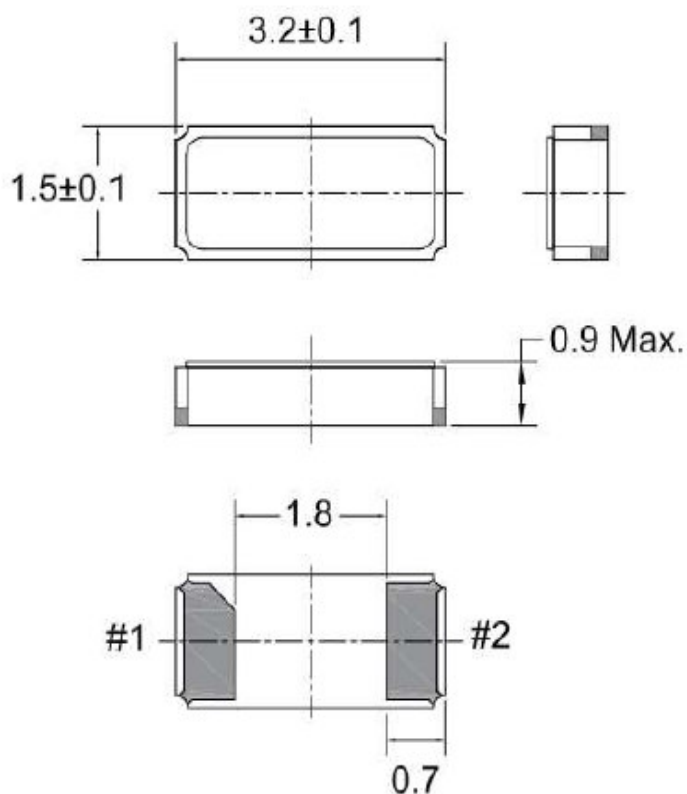
## 2 . RECOMMENDED SOLDERING PATTERN:( Unit : mm )



## 3. SOLDERING REFLOW PROFILE :



#### 4 . DIMENSIONS : ( Unit : mm )



Internal Connection



y: The last digit of production year.

m: Production month.(See Table 1)

H: Manufacture's ID Code

##: Lot.No.

Table 1

Month	1	2	...	9	10	11	12
Code	1	2	...	9	X	Y	Z