

Chengdu Kingbri Frequency Technology Co.,Ltd



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CREC QUARTZ CRYSTAL UNITS

RoHS

SPECIFICATIONS FOR APPROVAL

CUSTOMER: ZYF006

CUSTOMER P/NO: _____

OUR MODEL NO: Crystal Oscillator O.MB 50.000000MHz

DESCRIPTION: Quartz Crystal Oscillator O.MB

SPECIFICATIONS NO: 01.O.MB.GTHRIAF50000000

OUR DRAWING NO: _____

FOR CUSTOMER MODEL: _____

DATE: 2018-10-29

ENGINEERING DEPT:**APPROVED BY CUSTOMER :***Jack Huang*

SIGNATUER:

DATE:**DATE:**

2018-10-29

**Chengdu Kingbri Frequency Technology Co.,Ltd**

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SPECIFICATION

Client Name: ZYF006

Product : Quartz Crystal Resonator

General Part Number and Client Part Number:

General :

Client :

Manufacturer:

Chengdu Kingbri Frequency Technology Co.,Ltd

NO.8 BaiyeRoad,West District of Chengdu international High-tech Development Zone,Sichuan,China.

Post Code: 611731

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Prepared	Checked	Approved
<i>Yang Jing</i>	<i>Li Chunyan</i>	<i>Jack Huang</i>

Remarks:

Product Liability, Quality Assurance and Right of the patent shall be under the responsibility of the Manufacturer mentioned above.

Client Acknowledgement:

Date of receipt :



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Record of Change

	Issuing Date	Last	New	Page	Contents of	Reason	Remarks
		Version	Version	Item#	the Change		
1	2018/10/29	Ver 01					First Version
2							
3							
4							
5							
6							
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10							
11							
12							



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APPROVAL SHEET

SCOPE:

THIS SPECIFICATION SHOULD BE APPLIED TO CRYSTAL Oscillator, WHICH BE

DELIVERED TO ZYF006

CUSTOMER:

ZYF006

CREC PART NUMBER:

01.O.MB.GTHRIAF50000000

01:成品

O:普通振荡器(Oscillator)

MB:型号:SMD5032(陶瓷基座金属上盖封装)

工作电压:3.3V

T:Tri-state

标准频率:50.000000MHz

F:振荡模式:Fund

A:输出:CMOS, Duty 50+/-5%,15pF

RI:工作温度:-20~70度

总频差(OVERALL):±50ppm

PART TYPE :

QUARTZ CRYSTAL (Crystal Oscillator O.MB)



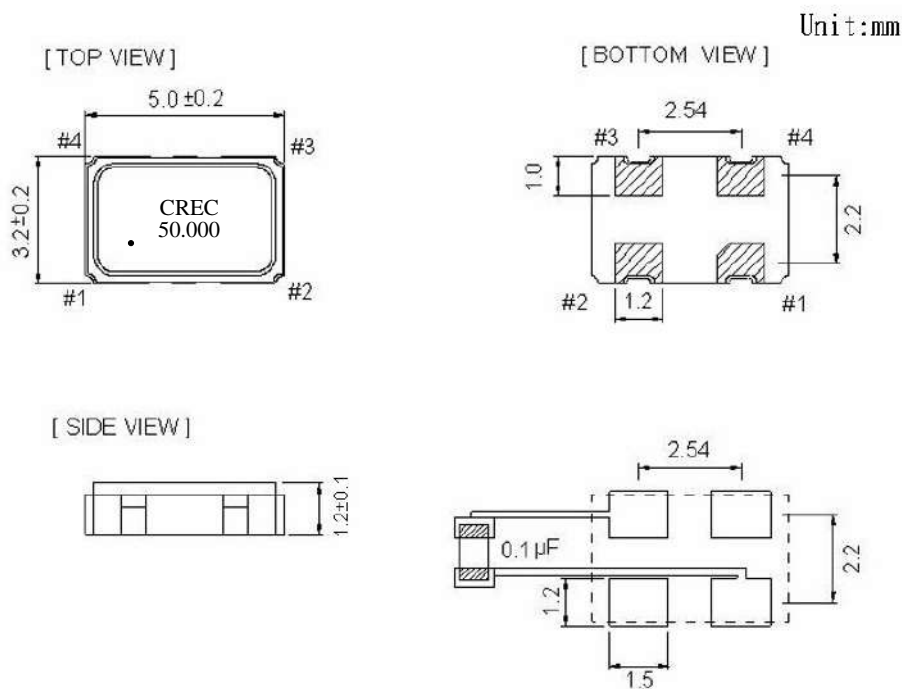
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1.SPECIFICATION OF QUARTZ CRYSTAL OSCILLATOR UNITS

1.1	Nominal Frequency	50.000000MHz
1.2	Output Mode	CMOS
1.3	Frequency Tolerance(at 25℃)	±50ppm
1.4	Frequency Stability (perating temp at 25℃)	±50ppm
1.5	Operating Temperature Range	-20℃～+70℃
1.6	Storage Temperature Range	-40℃～+85℃
1.7	Output Load Condition	15pF
1.8	Operating Voltage	3.3V±10%V
1.9	Supply Current	15mA/Max
1.10	Start Time	2ms/Max
1.11	Duty Cycle	45%-55%
1.12	T-Rise/Fall	2ns/Max
1.13	Tri-State(input to pin 1):Enable:	0.7VDD/Min
	Disable:	0.3VDD/Max
1.14	Output Level Logic"1":	90% VDD/Min
	Output Level Logic"0":	10% VDD/Max
1.15	Absolute Clock Periou Jitter	40pS/Max
1.16	RMS Phase Current	1pS/Max
	Standby Current	15μA/Max
1.17	Aging	±3ppm/year

2.1 HOLDER TYPE AND DIMENSION (mm)

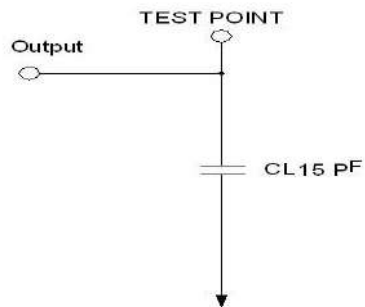




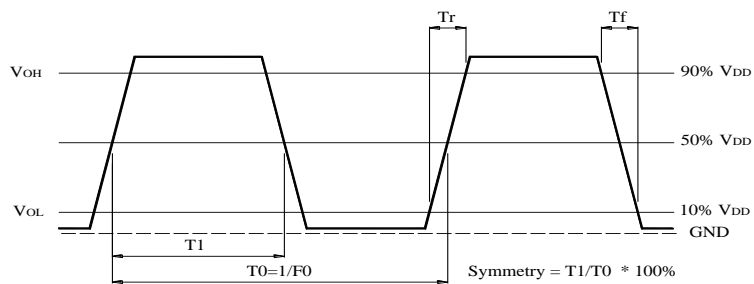
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2.2 Equivalent Circuit

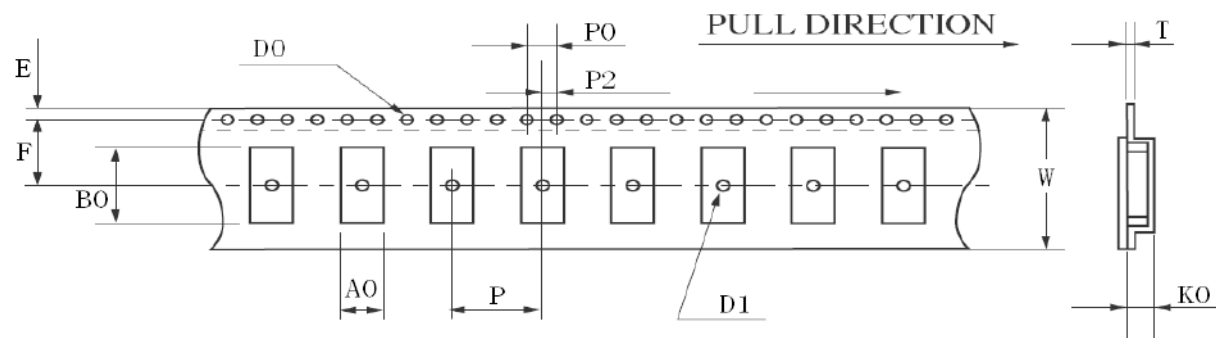


2.3 Output waveform :



2.4 THE SPELIFILATION OF TAPE PACKING

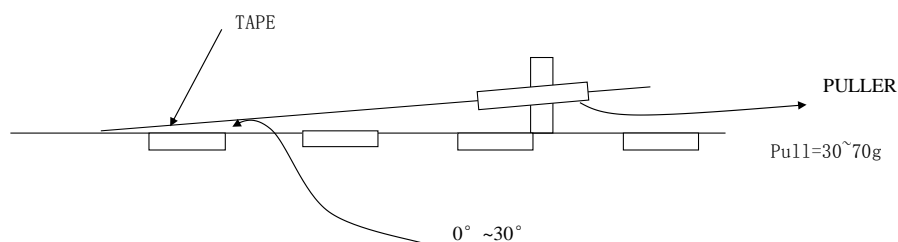
2.4.1 The packing requirements and methods of TAPE



W	E	F	T	P	P0	P2	D0	D1	A0	K0	B0
8.00±0.2	1.75±0.10	3.5±0.10	0.25±0.05	4.00±0.10	4.00±0.10	2.00±0.10	φ1.55±0.05	φ1.50MIN	2.70±0.10	1.40±0.10	3.40±0.10

2.4.2 Pull test of TAPE Packing

Tools: Puller and speed Monitor (2mm±1mm/sec)

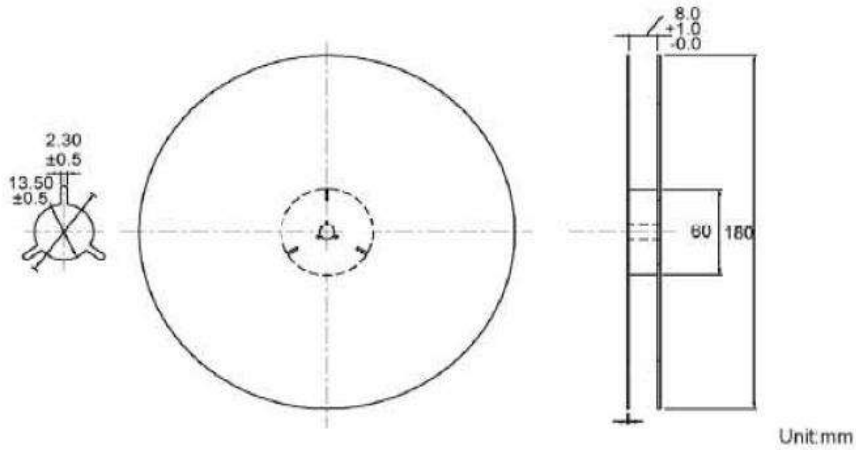




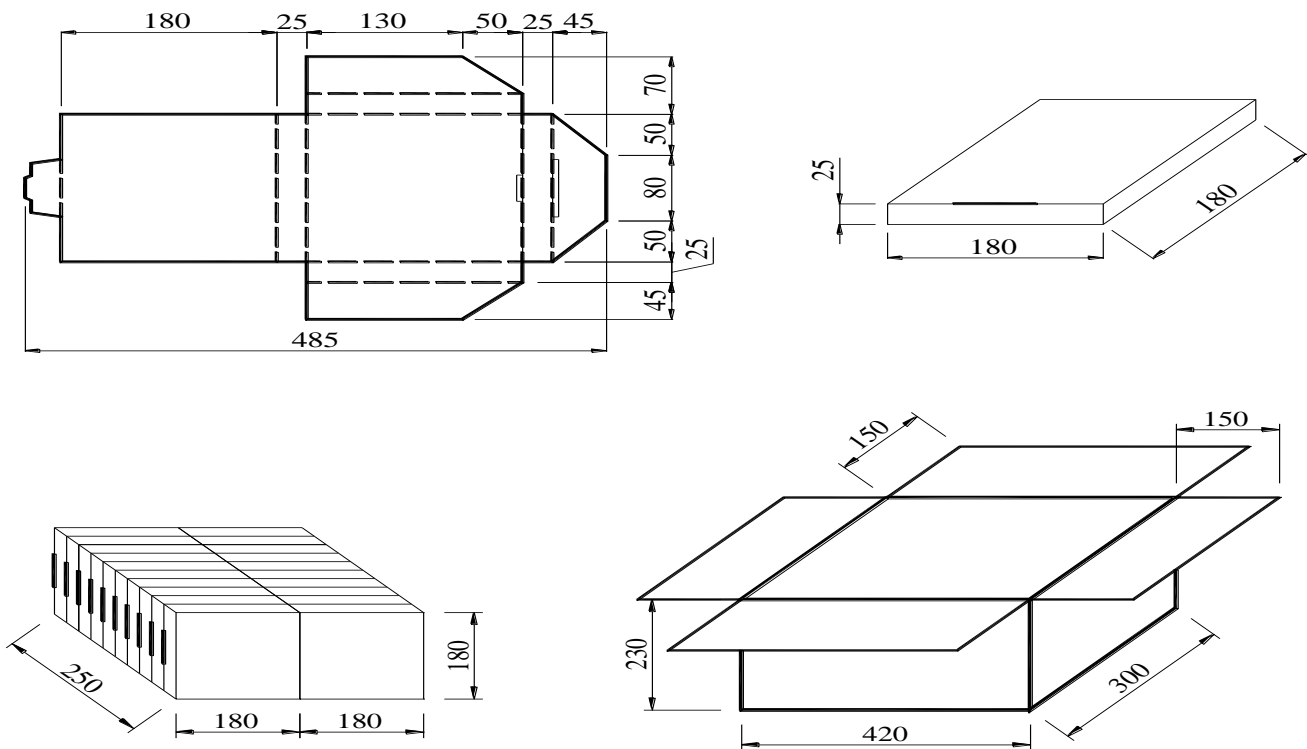
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2.5 PACKING FOR APPROVAL



Carton Dimension (unit : mm)



20 Inner boxes = 1 Carton

60K pcs = 1 Carton



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3.MECHANICAL ENDURANCE

Provided that measurement shall be carried out after letting it alone in the room temperature for 1 hour.

3.1.SHOCK

Electrical characteristics shall be satisfied after dropping three times from the height of 100cm onto the Concrete.

3.2.VIBRATION

Electrical characteristics shall be satisfied after supplying following vibration.

a).ENTIRE FREQUENCY RANGE	10~2000Hz
b).REPEATED PERIOD	1~2min
c).AMPLITUDE	1.52mm
d).DIRECTION	X.Y.Z
e).ACCELERATED SPEED	20g
f).PERIOD	4hours/Each Direction

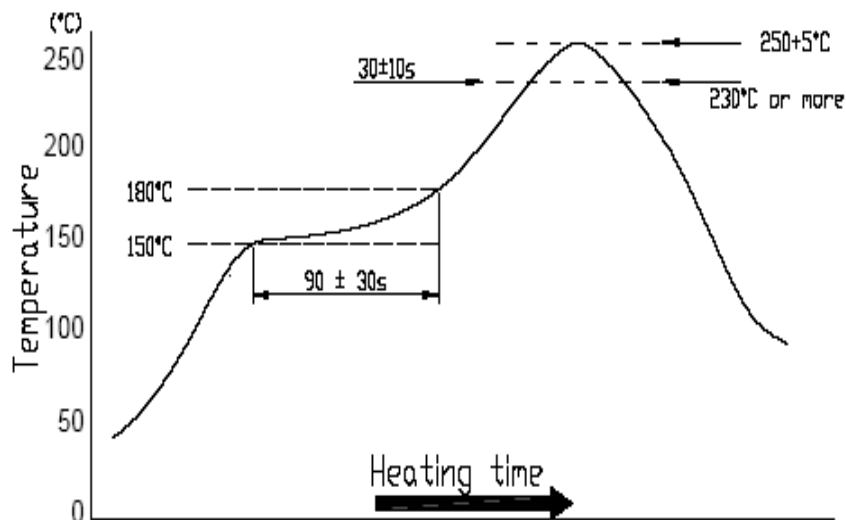
3.3.SEALING TIGHTNESS

Put the specimens in C_2H_5OH , raise pressure it with 0.5Mpa for 10 min,
test the insulation resistance at DC.100V, the result shall be over 500M Ω .
Electrical characteristics shall be satisfied and no sealing damage.

3.4.SOLDERING HEAT RESISTANCE

Electrical characteristics shall be satisfied .Without distinct looseness of terminals.

①.FLOW Soldering





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②.SOLDERING DIP

Terminals/lead-wires of specimen shall be dipped into solder melter tank
at $+245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5 ± 0.5 sec.

③.SOLDER HEATING

Terminals/lead-wires of specimen shall be dipped into solder melter tank
at $+260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 10 ± 1 sec.

5.5.ENVIRONMENTAL ENDURANCE

Provided that measurement shall be carried out after letting it
alone in the room temperature for 1 hour.

①HUMIDITY

Electrical characteristics shall be satisfied after letting it alone at $60 \pm 2^{\circ}\text{C}$
in humidity of 95% for 500 hours.

②.STORAGE IN LOW TEMPRATURE

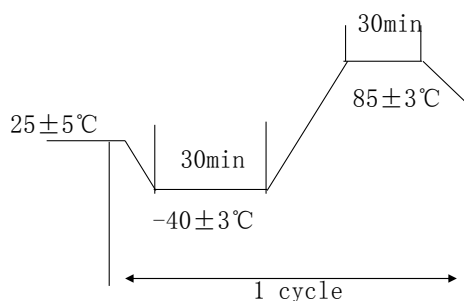
Electrical characteristics shall be satisfied after letting it alone at $-40 \pm 3^{\circ}\text{C}$
for 168 hours.

③.STORAGE IN HIGH TEMPRATURE

Electrical characteristics shall be satisfied after letting it alone at $125 \pm 2^{\circ}\text{C}$
for 168 hours.

④.TEMPERATURE CYCLE

Electrical characteristics shall be satisfied after supplying the following temperature
cycle(3cycle).Temperature shift from low to high, high to low shall be done in
 $1^{\circ}\text{C}/\text{sec}$.



Country of Origin: China

Factory Name & Location:

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Confirmation of Advanced notice of significant change

Messrs. ZYF006

Advanced notice of any significant alteration

We confirm here that in any case of the following alteration, you will have our written pre-notification and we will not put them into practice unless otherwise we receive your acceptance of the alteration.

- 1.Any change of the contents of the agreed specification of the goods
- 2.Any change of anything not mentioned in the specification but deeply related with the quality, performance and/or reliability of the goods.
- 3.Change of materials and/or its supplier of the goods
- 4.Change of the factory and/or sub-contracted factory of the goods
- 5.Any major change of production procedure of the goods including renewal of production machines.

Oct.29.2018

Jack Huang

Authorized Signature

Chengdu Kingbri Frequency Technology Co.,Ltd