

QUARTZ CRYSTAL UNIT

SERIES 71, SEAM SEALED CERAMIC 5.0*3.2MM SURFACE MOUNT PACKAGE



深圳市晶科鑫实业有限公司

Shenzhen Crystal Technology Industrial Co., Ltd

APPROVAL SHEET

CUSTOMER P/N:					
TYPE:	SMD CRYSTAL				
DESCRIPTION:	SMD5032/4PIN	8.000MHZ	18PF	±20PPM	-40~85℃
P N/ SJK:	7I08000F18UCG				
ENVIRONMENTAL:	☒ RoHS	☒ REACH	☒ HF	☐ PAHS	☐ other
REVISION:	A1 2017-5-10			MOQ:	1000pcs/real
MSL:	Levels 1				

SIGNATURE							
SUPPLIER			CUSTOMER				
Issue	Check	Approve	QA	Check	Approve		
SJK	18682088994 (Mr. Huang)		Signature				
FAE_EMAIL	sjk-fae@q-crystal.com		Date				
Date			Approve: ☐ accept ☐ unaccepted				
Note:							

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1. TESTING CONDITION

Standard atmospheric conditions

Unless otherwise specified, the standard range of atmospheric conditions for making measurement

and tests are as follow:

Ambient temperature : $25 \pm 5^{\circ}\text{C}$

Relative humidity : 40%~70%

Measure equipment

Electrical characteristics measured by S&A250B or equivalent.

2. ELECTRICAL SPECIFICATIONS

Output Frequency Range	8.000000MHz
Mode	AT/Fundamental
Frequency Tolerance	± 20 ppm max (at 25°C)
Load Capacitance(C_L)	18.0 PF
Frequency Stability Over Operating Temperature Characteristics	± 30 ppm max
Operating Temperature Range	-40°C to $+85^{\circ}\text{C}$
Storage Temperature Range	-40°C to $+125^{\circ}\text{C}$
Shunt Capacitance (C_0)	3.0 PF Max
Driver Level (Typical)	100 μW
Equivalent Series Resistance(ESR)	80 Ω Max
Aging @ 25°C 1 st year (Max)	± 3 ppm/year

Tel: 0755-88352810-837(Mr.huang) Fax: 0755-88353718 <http://www.q-crystal.com>

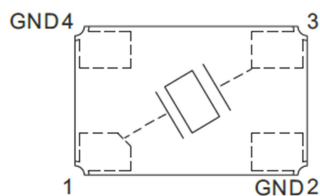
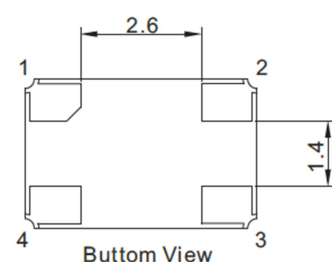
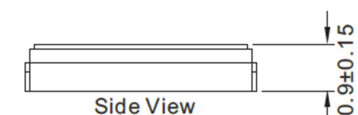
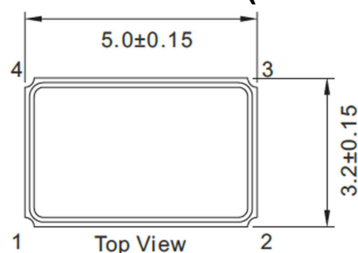
ADD: Room 1204~1206,Building 3C, TianAn Cloud Park Phase 1,Bantian, Longgang District, Shenzhen

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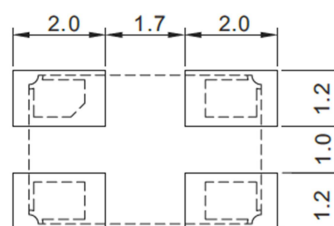


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3. DIMENSION (Units: mm)

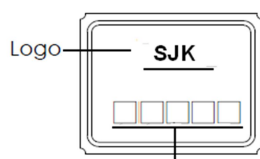


Top View Crystal Connection



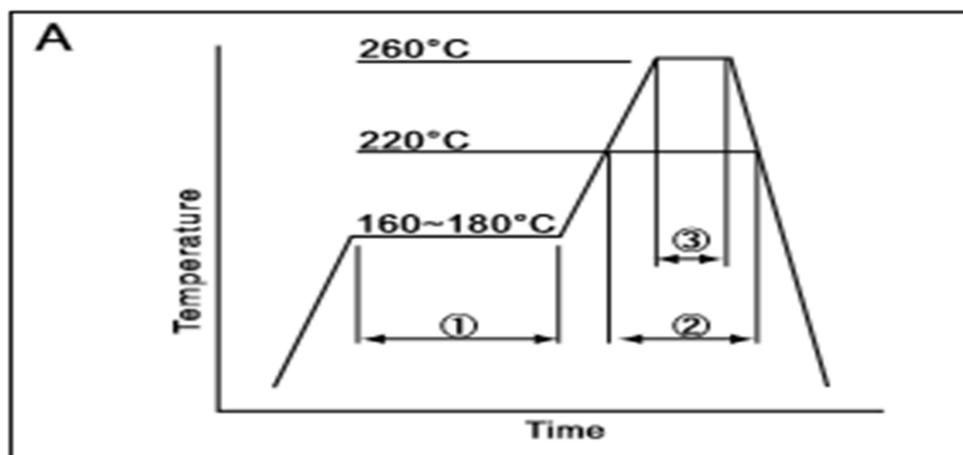
Top View Suggested Layout

4. MARKING



Frequency Code
26.000MHZ = 26.000

5. REFLOW CONDITION



①	Preheat	160~180°C	120sec.
②	Primary heat	220°C	60sec.
③	Peak	260°C	10sec. max

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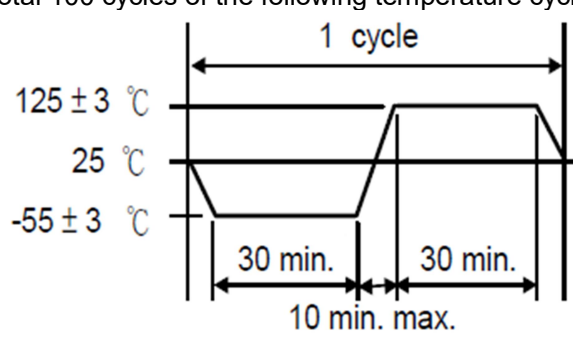
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6 RELIABILITY TEST SPECIFICATION

1. Mechanical Endurance

No.	Test Item	Test Methods	REF.DOC
1.1	Drop Test	150 cm height, 3 times on concrete floor.	JIS C6701
1.2	Mechanical Shock	Device are shocked to half sine wave (1000 G) three mutually perpendicular axes each 3 times. 0.5m sec. duration time	MIL-STD-202F
1.3	Vibration	Frequency range 10 ~ 2000 Hz Amplitude 1.52 mm/20G Sweep time 20 minute Perpendicular axes each test time 4 hours (Total test time 12 hours)	MIL-STD-883E
1.4	Gross Leak	Standard Sample For Automatic Gross Leak Detector, Test Pressure: 2Kg / cm ²	MIL-STD-883E
1.5	Fine Leak	Helium Bombing 4.5 Kg/ cm ² for 2 hr	MIL-STD-883E
1.6	Solder ability	Temperature 245 °C ± 5°C Immersing depth 0.5 mm minimum Immersion time 5 ± 1 seconds Flux Rosin resin methyl alcohol solvent (1 : 4)	MIL-STD-883E

2. Environmental Endurance

No.	Test Item	Test Methods	REF.DOC
2.1	Resistance To Soldering Heat	Pre-heat temperature 125 °C Pre-heat time 60 ~ 120 sec. Test temperature 260 ± 5 °C Test time 10 ± 1 sec.	MIL-STD-202F
2.2	High Temp. Storage	+ 125 °C ± 3 °C for 500 ± 12 hours	MIL-STD-883E
2.3	Low Temp. Storage	- 40 °C ± 3 °C for 500 ± 12 hours	MIL-STD-883E
2.4	Thermal Shock	Total 100 cycles of the following temperature cycle 	MIL-STD-883E
2.5	High Temp & Humidity	85°C ± 3°C, RH 85% , 500Hrs	JIS C5023
2.6	Pressure Cooker Storage	121 ± 3°C , RH100% , 2 bar , 240Hrs	JIS C6701

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