



ShaanXi DongXin HengKe Electronics Co., LTD

陕西东芯恒科电子有限公司

SMD Glass Sealed CRYSTAL RESONATOR

SMD X'TAL7.00 x 1.50 x 1.40mm

Applications

RTC.

Features

Dimensions:7.00 x 1.50 x 1.40mm

Refflow soldering is available

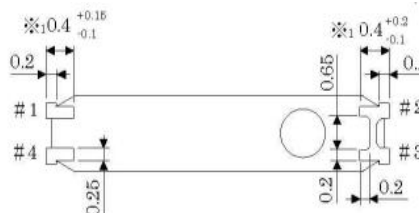
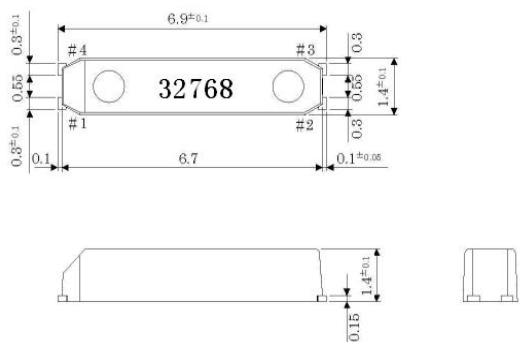
Standard Frequency: 32.768KHz



Specifications

Project	项目	SPECIFICATION 规格
Frequency	频率范围	32.768KHZ
Holder Type	支架类型	MC-146
Frequency Tolerance	频率公差	±10ppm at 25°C±5°C
Equivalent Series Resistance	等效串联电阻	65KΩMax
Storage Temperature Range	储存温度范围	-20°C ~ + 70°C
Operating Temperature Range	工作温度范围	-10°C ~ + 60°C
Frequency Characteristics Over	频率稳定性	±30ppm -10°C TO +60°C
Load Capacitance (CL)	负载电容	12.5PF
Drive Level	激励电平	1.0uW MAX
Shunt Capacitance	寄生电容	1.35PF MAX
Insulation Resistance	绝缘电阻	500MΩ Min at D.C.100 V
Capacitance ratio	电容比	650 Max
Aging	老化	±5ppm/Year

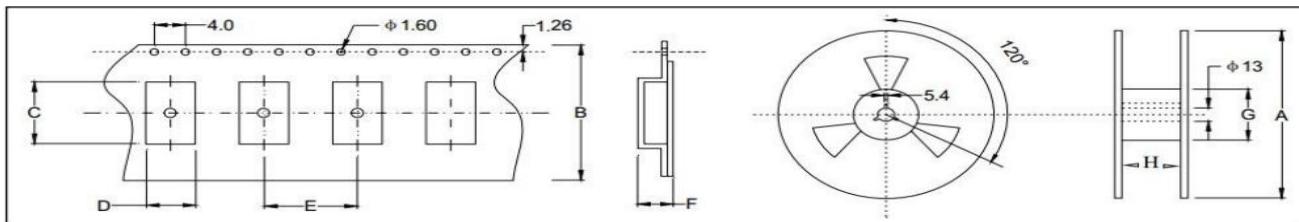
Dimensions and Patterns [unit:mm]



SMD Glass Sealed CRYSTAL RESONATOR

SMD X'TAL7.00 x 1.50 x1.40mm

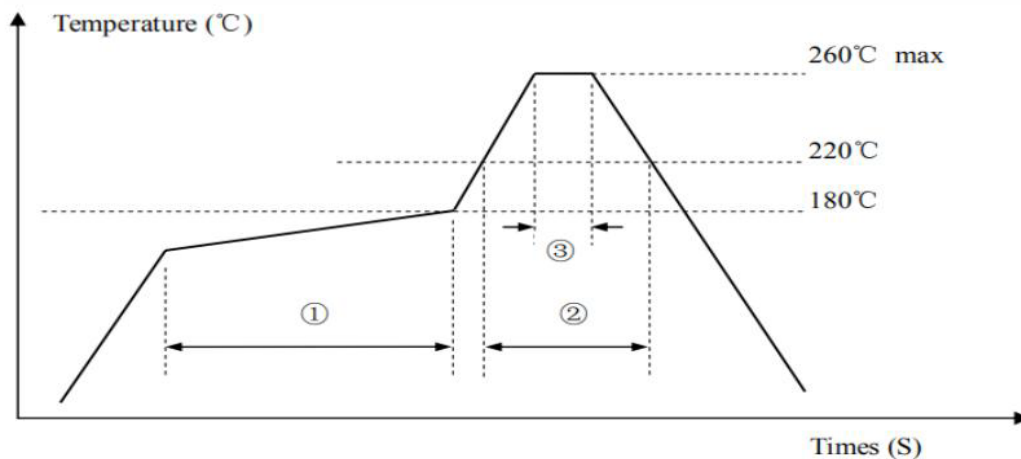
Taping Specification(Unit: mm)



Size	A	B	C	D	E	F	G	H
SMD-7015	330±2.0	16.0±0.3	7.20±0.1	1.70±0.1	4.0±0.1	1.5±0.1	61.0±1.0	16.0±1.0

3000 pcs per reel

REFLOW SOLDERING PROFILE



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



ShaanXi DongXin HengKe Electronics Co., LTD

陕西东芯恒科电子有限公司

SMD Glass Sealed CRYSTAL RESONATOR

SMD X'TAL7.00 x 1.50 x1.40mm

3. PHYSICAL AND ENVIRONMENTAL CHARACTERISTICS

3-1. Humidity

Subject the crystal at $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and 90% - 95% RH for 96 ± 4 hours
Then release the crystal into the room conditions for 1hour prior to the measurement .

3-2. High Temperature Exposure

Subject the crystal to $85^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 96 ± 4 hours . Then release the crystal into the room conditions for 1hour prior to the measurement .

3-3. Low Temperature

Subject the crystal to $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 96 ± 4 hours . Then release the crystal into the room conditions for 1hour prior to the measurement

3-4. Mechanical Shock

Drop the crystal randomly onto a concrete floor from the height of 75cm 3 times .

3-5. Temperature Cycling

Subject the crystal to -30°C for 30 min. followed by a high temperature of $+85^{\circ}\text{C}$ for 30 min. Cycling shall be repeated 5times with a transfer time of 15sec. at the room condition . Then release the resonator into the room temperature for

3-6. Vibration

Subject the crystal to vibration for 2hours each in x, y, and z axes with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10-55 Hz .

3-7. Resistance to Solder Heat

Dip the crystal terminals no closer than 2 mm into the solder bath $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5 ± 1 sec; Then release the crystal into the room temperature for 1hour prior to the measurement .

3-8. Solder Ability

Dip the crystal terminals no closer than 2 mm into the solder bath at $235^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 3 ± 0.5 sec .more than 95% of the erminal surface of the crystal shall be covered with fresh solder.

3-9. Lead Fatigue

1) Pulling Test

Weight along with the direction of terminals without any shock 0.5kg for 10 ± 1 sec.; The crystal shall no evidence of damage and shall fulfill all the initial electric characteristics.

2) Bending Test

Lead shall be subject to withstand against 90 degree bending at its stem This operation shall be done towards both direction; The crystal shall no evidence of damage and shall fulfill all the initial electric characteristics.

4. REVIEW OF SPECIFICATION

When something get doubtful with this specifications, we shall jointly work to get an agreement.