

CUSTOMER 客户:

规格书编号

**SPEC NO:** 

# 产品规格书 SPECIFICATION

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PRODUCT 产品:	CRYSTAL RESONATOR						
MODEL NO 型 号:	SMD2016-16.000-F-8-10/15/E						
PREPARED 编 制:	LEO		CHECKED 审 ‡		核:	YORK	
APPROVED 批准:	.PPROVED 批 准: LI		JMING DATE日期		朝:	月: 2017-06-30	
客户确认 CUSTOMER RECEIVED:							
审核 CHECKED		批准 APPROVED			日期 DATE		

无锡市好达电子有限公司 Shoulder Electronics Limited

www.shoulder.cn



## 更改历史记录 History Record

更改日期 Date	规格书编号 Spec No	产品型号 Part No	客户产品型号 Customer No	更改内容描述 Modify Content	备注 Remark

Page 2 of 6 www.shoulder.cn

### **SPECIFICATIONS**

#### 1、GENERAL

Oscillation Mode: AT-CUT, Fundamental

Nominal Frequency: 16.000 MHz

Load Capacitance: 8PF

Storage Temperature: from -55 to  $+125^{\circ}$ C

Operable Temperature: from -40 to  $+85^{\circ}$ C

#### 2, ELECTRICAL PERFORMANCE

Frequency Tolerance:  $\pm 10$ ppm at  $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ 

Temperature Stability:  $\pm 15$ ppm from -40 to +85 °C

Series Resistance: 100 Ohm max.

Shunt Capacitance: 5.0 pF max.

Drive Level Nominal: 100 μw max. (10μW typical)

Insulation Resistance:  $500 \text{ M}\Omega$  at DC 100V

Aging:  $\pm 3$ ppm/year

Package Spec: TAPE & REEL

#### 3、REMARKS

Marking:

Pb Free & RoHS Compliant: Yes

### **SPECIFICATIONS**

### PHYSICAL & ENVIRONMENTAL PARAMETERS:

www.shoulder.cn Page 3 of 6

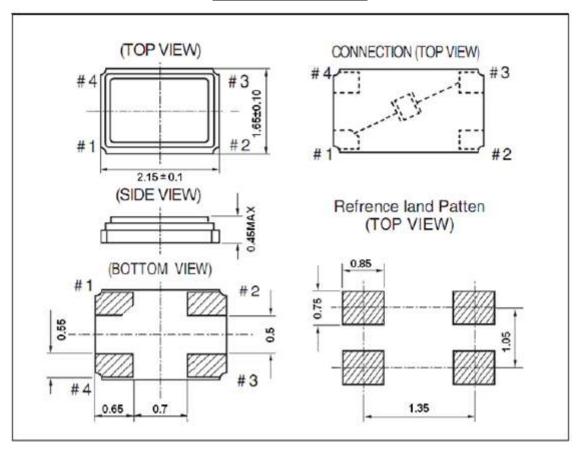


No	DESCRIPTION	CONTENTS	Requirements	
1	Vibration	10~55Hz, 0.75mm amplitude, in 3 directions duration of 30 minutes.	No mechanical damage and the measured values shall meet electrical parameters.	
2	Random Dropping	The crystal will be test by natural dropping to 30mm wooden broad 3 times from high of 30 cm.		
3	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at $260\pm$ 5°C for $10\pm0.5$ sec.	At least 95% of the terminal surface shall be coated by the solder	
4	Resistance Solder Heat	Dipped the terminals up to 2 mm into the solder bath $(260\pm5^{\circ}\text{C})$ for 3 sec, placed in a natural condition for 2 hours.		
5	Thermal Shock	Temperature cycling from -40 $^{\circ}$ C (30mins) to +85 $^{\circ}$ C (30mins) was performed 3 times, then placed in a natural condition for 2 hours.		
6	Life Test (High Temperature)	Placed in a chamber $(85\pm2^{\circ}\text{C})$ for 48 hours, then placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.	
7	Life Test (Low Temperature) Placed in a chamber $(-40\pm2^{\circ}\mathbb{C})$ for 48 hours, then placed in a natural condition for 2 hours.			
8	Humidity	Placed in a chamber (Humi: $90 \sim 95\%$ RH, Temp: $40 \pm 2 °C$ ) for 48 hours, then placed in a natural condition for 2 hours.		

Page 4 of 6 www.shoulder.cn

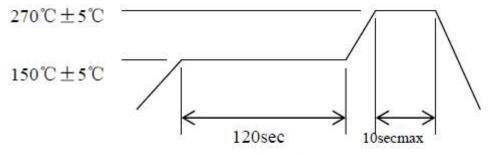


### **DIMENSIONS**



Unit: mm

### **REFLOW PROFILE**



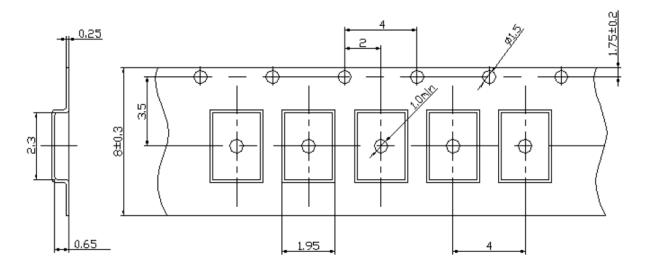
CYCLE TIME周期: 200sec Max.

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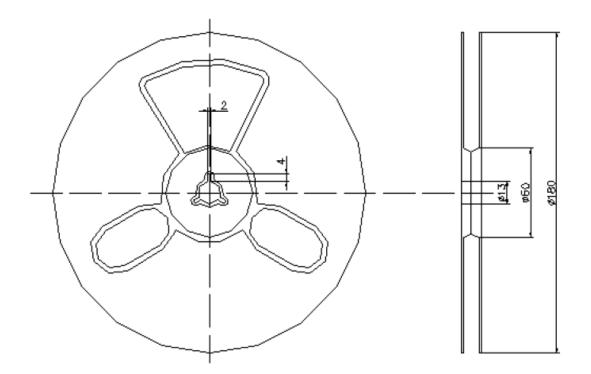


## **PACKING INFORMATION**

TAPE DIMENSIONS (UNIT: mm)



**REEL** 



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