

规格书编号

SPEC NO :

# 产品规格书

# SPECIFICATION

CUSTOMER 客户: \_\_\_\_\_  
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: \_\_\_\_\_ LIUMING \_\_\_\_\_ DATE 日期: \_\_\_\_\_ 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



## SPECIFICATIONS

---

### 1、GENERAL

---

Oscillation Mode:	AT-CUT, Fundamental
Nominal Frequency:	16.000 MHz
Load Capacitance:	8PF
Storage Temperature:	from -55 to +125°C
Operable Temperature:	from -40 to +85°C

---

### 2、ELECTRICAL PERFORMANCE

---

Frequency Tolerance:	$\pm 10\text{ppm at } 25^\circ\text{C} \pm 3^\circ\text{C}$
Temperature Stability:	$\pm 15\text{ppm from } -40 \text{ to } +85^\circ\text{C}$
Series Resistance:	100 Ohm max.
Shunt Capacitance:	5.0 pF max.
Drive Level Nominal:	100 $\mu\text{w}$ max. (10 $\mu\text{W}$ typical)
Insulation Resistance:	500 M $\Omega$ at DC 100V
Aging:	$\pm 3\text{ppm/year}$
Package Spec:	TAPE & REEL

---

### 3、REMARKS

---

Marking:

---

Pb Free & RoHS Compliant: Yes

---

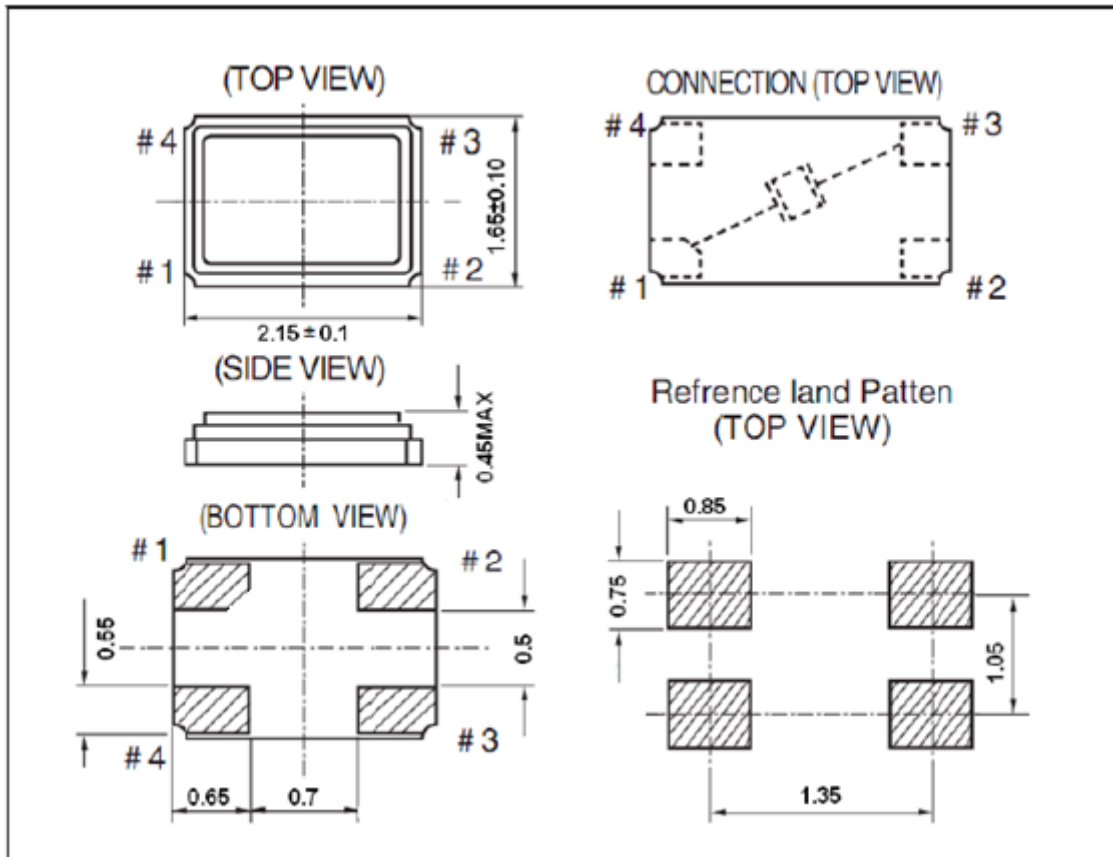
## SPECIFICATIONS

### PHYSICAL & ENVIRONMENTAL PARAMETERS:

---

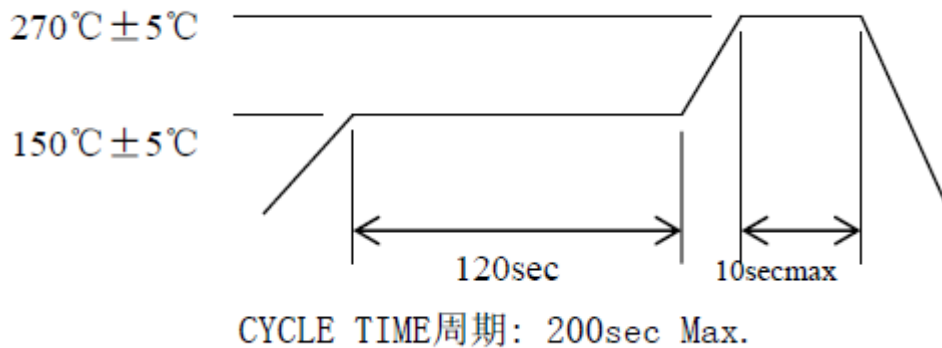
No	DESCRIPTION	CONTENTS	Requirements
1	Vibration	10~55Hz, 0.75mm amplitude, in 3 directions duration of 30 minutes.	No mechanical damage and the measured values shall meet electrical parameters.
2	Random Dropping	The crystal will be test by natural dropping to 30mm wooden broad 3 times from high of 30 cm.	
3	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at $260 \pm 5^{\circ}\text{C}$ for $10 \pm 0.5$ 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 ( $260 \pm 5^{\circ}\text{C}$ ) for 3 sec, placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.
5	Thermal Shock	Temperature cycling from $-40^{\circ}\text{C}$ (30mins) to $+85^{\circ}\text{C}$ (30mins) was performed 3 times, then placed in a natural condition for 2 hours.	
6	Life Test (High Temperature)	Placed in a chamber ( $85 \pm 2^{\circ}\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	
7	Life Test (Low Temperature)	Placed in a chamber ( $-40 \pm 2^{\circ}\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	
8	Humidity	Placed in a chamber (Humi: 90~95% RH, Temp: $40 \pm 2^{\circ}\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	

**DIMENSIONS**



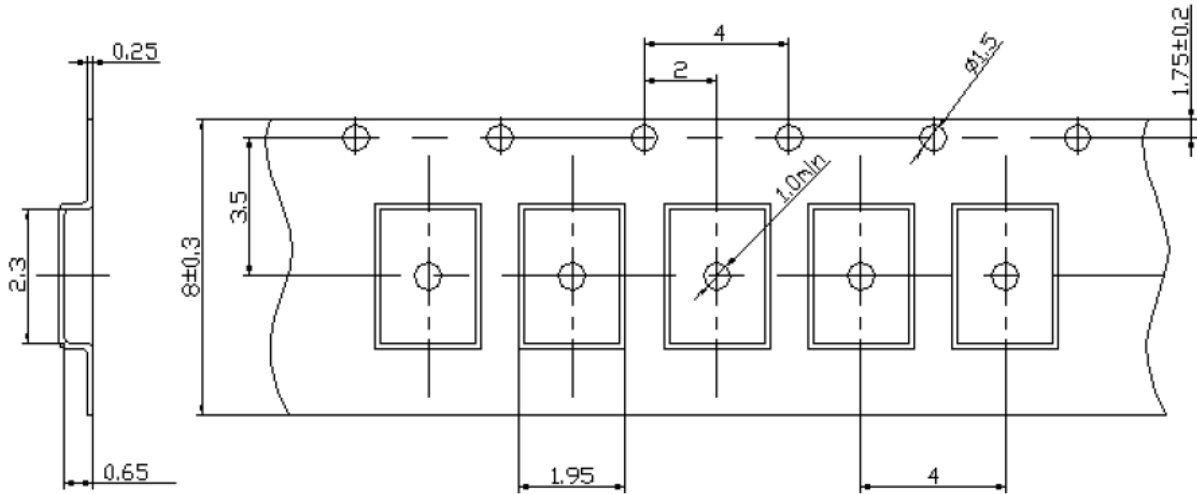
Unit: mm

**REFLOW PROFILE**



**PACKING INFORMATION**

TAPE DIMENSIONS (UNIT: mm)



REEL

