

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: \_\_\_\_\_ SMD0503-27.120-10-10/10/A

PREPARED 编 制: \_\_\_\_\_ LEO CHECKED 审 核: \_\_\_\_\_ YORK

APPROVED 批 准: \_\_\_\_\_ LIUMING D A T E 日 期: \_\_\_\_\_ 2017-09-13

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

## 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

## SPECIFICATIONS

### 1、GENERAL

Oscillation Mode:	AT-CUT, Fundamental
Nominal Frequency:	27.120MHz
Load Capacitance:	10pF
Storage Temperature:	from -40 to +85℃
Operable Temperature:	from -20 to +70℃

### 2、ELECTRICAL PERFORMANCE

Frequency Stability:	$\pm 10\text{ppm at } 25^{\circ}\text{C} \pm 3^{\circ}\text{C}$
Temperature Characteristics:	$\pm 10\text{ppm from } -20 \text{ to } +70^{\circ}\text{C}$
Series Resistance:	60Ohm max.
Shunt Capacitance:	7.0 pF max.
Drive Level Nominal:	100 uW $\pm 20\%$
Insulation Resistance:	500 m $\Omega$ at DC 100V
Aging:	$\pm 3\text{ppm/year}$
Package Spec:	TAPE & REEL

### 3、REMARKS

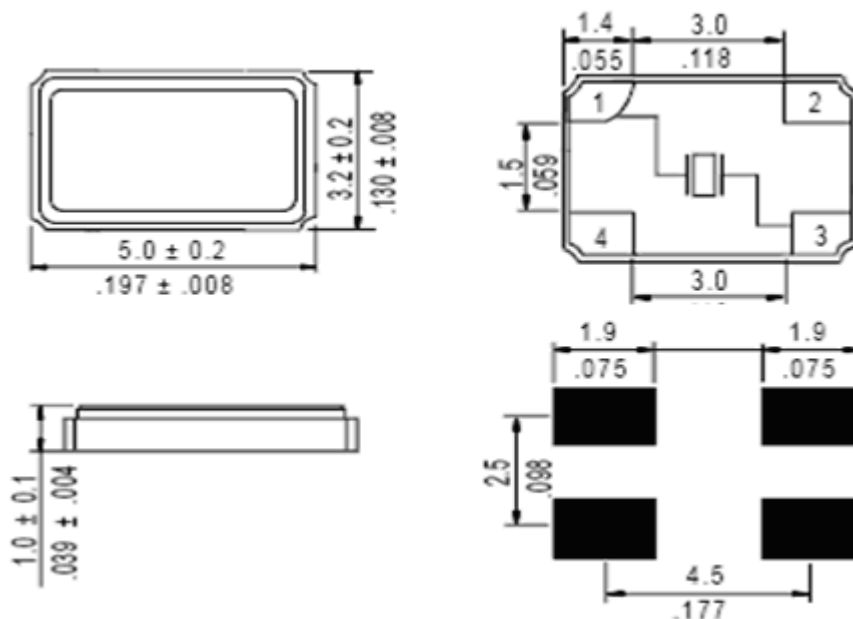
Marking:	SDE 27.120MHZ
Pb Free & RoHS Compliant:	Yes

## SPECIFICATIONS

PHYSICAL & ENVIRONMENTAL PARAMETERS:

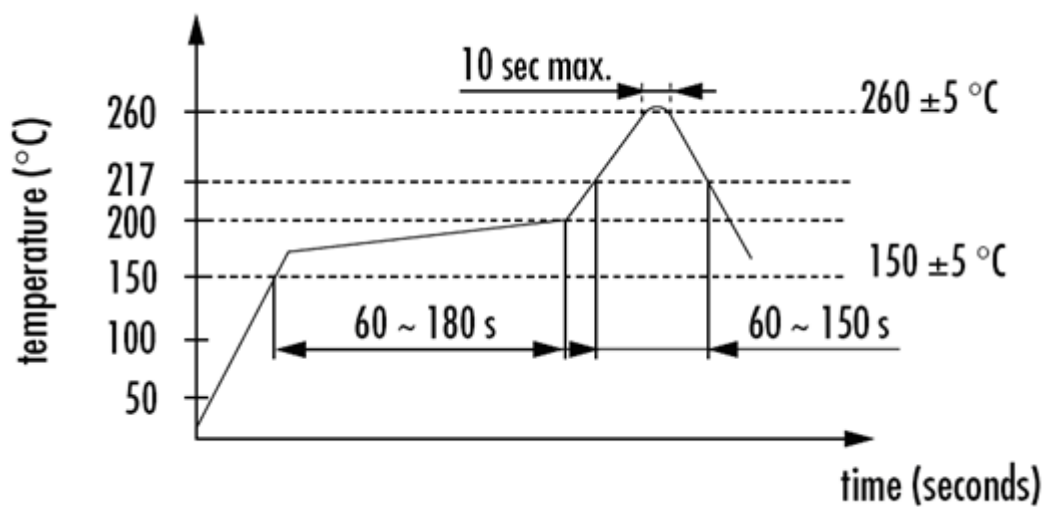
No	DESCRIPTION	CONTENTS	Requirements
1	Lead Strength	Force of 0.9 kg is applied for 5 seconds to each lead in axial direction.	No mechanical damage and the measured values shall meet electrical parameters.
	Lead Bending	Firmed the terminal up to 2 mm, lead shall be subjected to withstand against 90° bending its stem. This operation shall be done toward both direction.	
	Vibration	10~55Hz , 0.75mm amplitude, in 3 directions duration of 30 minutes.	
3	Random Dropping	The crystal will be test by natural dropping to 100mm wooden board 3 times from high of 30 cm.	
4	Solder Stability	Dipped the terminals no closer than 2 mm into the solder bath at $235 \pm 5^{\circ}\text{C}$ for $10 \pm 0.5$ sec.	At least 95% of the terminal surface shall be coated by the solder
5	Resistance Solder Heat	Dipped the terminals up to 2 mm into the solder bath ( $260 \pm 5^{\circ}\text{C}$ ) for 5 sec., placed in a natural condition for 2 hours.	Measured values shall meet electrical parameters.
6	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.	
7	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.	
8	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.	
9	Humidity	Placed in a chamber (Humi: 90~95% RH, Temp: $60 \pm 2^{\circ}\text{C}$ ) for 48 hours, then placed in a natural condition for 2 hours.	

## **DIMENSIONS**



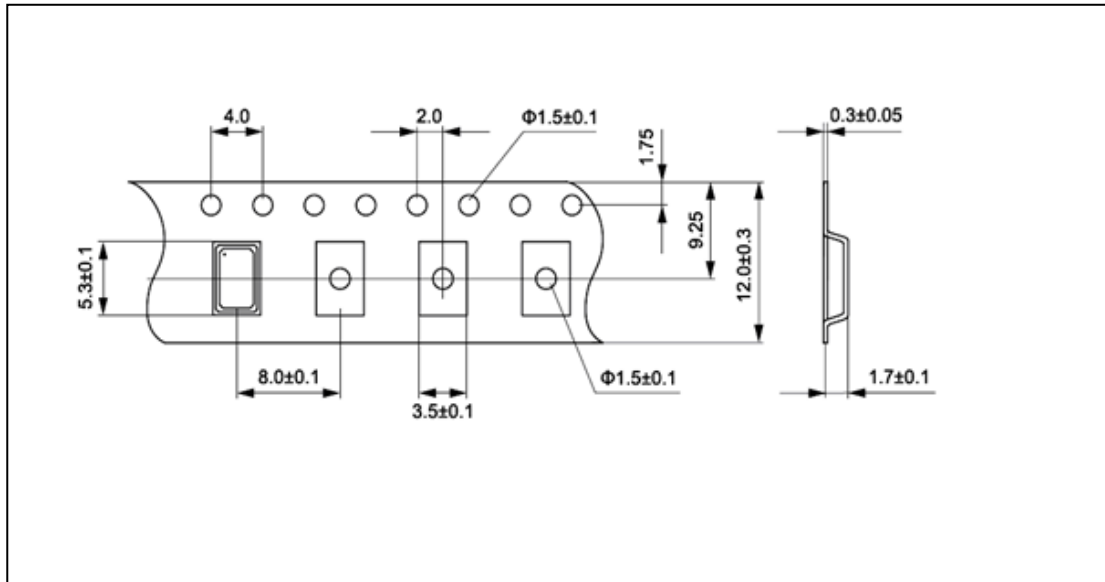
Unit: mm

## REFLOW PROFILE



## **PACKING INFORMATION**

TAPE DIMENSIONS Unit: mm



REEL

