

规格书编号

**SPEC NO: HDR378.3MS6SP01**

# 产品规格书(预期)

## Preliminary SPECIFICATION

CUSTOMER 客户: \_\_\_\_\_  
PRODUCT 产品: \_\_\_\_\_ SAW RESONATOR  
MODEL NO 型号: \_\_\_\_\_ HDR378.3M-S6  
PREPARED 编制: \_\_\_\_\_ CHECKED 审核: \_\_\_\_\_  
APPROVED 批准: \_\_\_\_\_ D A T E 日期: \_\_\_\_\_ 2018-9-10

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



## 1. Scope

This specification shall cover the characteristics of 1-port SAW resonator with R378.3M used for remote-control security.

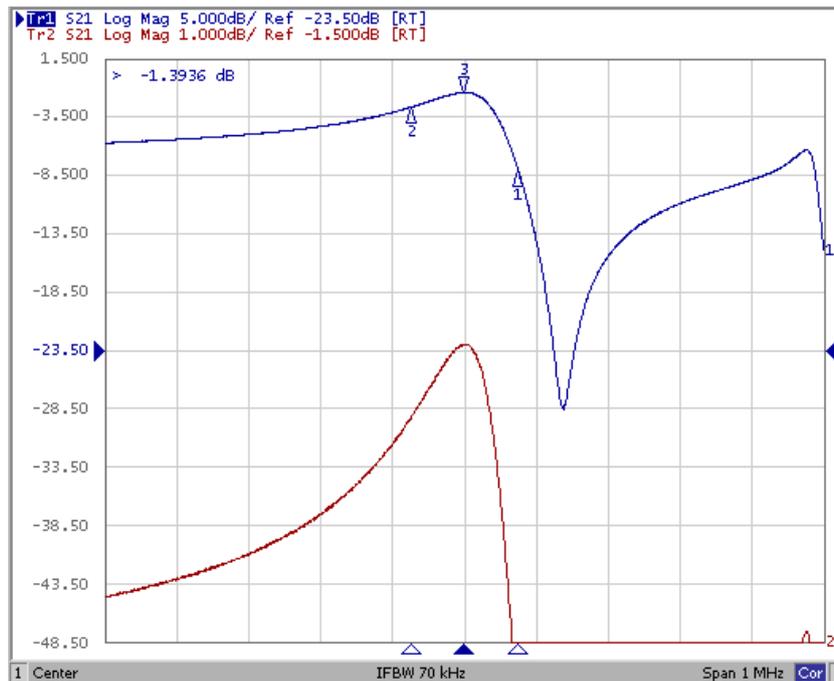
## 2. Electrical Specification

### 2.1 Maximum Rating

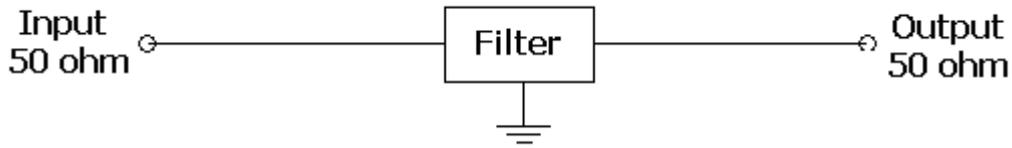
DC Voltage VDC	10V
AC Voltage Vpp	10V 50Hz/60Hz
Operation temperature	-40°C to +85°C
Storage temperature	-45°C to +85°C
Max input Power	10dBm

### 2.2 Electronic Characteristics

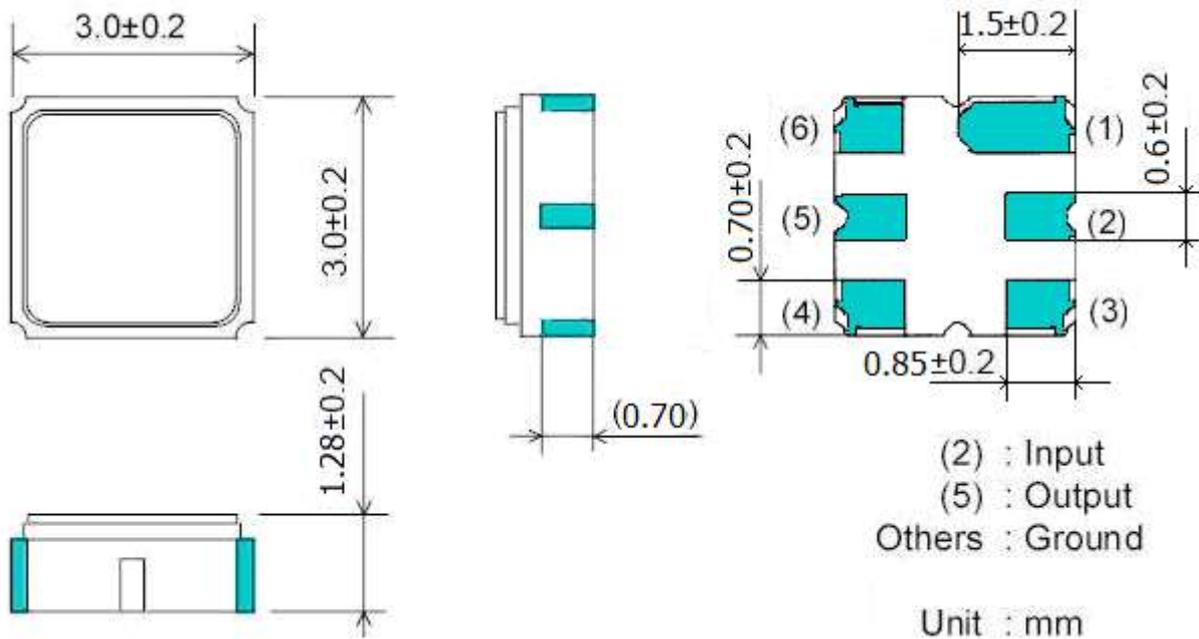
Item	Unites	Minimum	Typical	Maximum
Center Frequency	MHz	378.225	378.300	378.375
Insertion Loss	dB		1.5	2.5
Quality Factor	Unload Q	8000	12000	
	50Ω Loaded Q	800	2000	
Temperature Stability	Turnover Temperature	°C	10	25
	Freq.temp.Coefficient	ppm/°C		0.032
Frequency Aging	ppm/yr		<±10	
DC. Insulation Resistance	MΩ	1.0		
Transducer Static Capacitance C0	pF		2.3	



### 3. Test Circuit



### 4. Dimension



### 5. Environment Characteristic

#### 5-1 High temperature exposure

Subject the device to +85°C for 16 hours. Then release the resonator into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 2.2.

#### 5-2 Low temperature exposure

Subject the device to -40°C for 16 hours. Then release the device into the room conditions for 24 hours prior to the measurement. It shall fulfill the specifications in 2.2.

#### 5-3 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of +85°C for 30 Minutes. Then release the device into the room conditions for 24 hours prior to the measurement. It shall meet the specifications in 2.2.

#### 5-4 Resistance to solder heat

Dip the device terminals no closer than 1.5mm into the solder bath at 260°C ±10°C for 10±1 sec. Then release the device into the room conditions for 4 hours. The device shall meet the specifications in 2.2.

#### 5-5 Solderability

Subject the device terminals into the solder bath at 245°C ±5°C for 5s, More than 95%

area of the terminals must be covered with new solder. It shall meet the specifications in 2.2.

#### 5-6 Mechanical shock

Drop the device randomly onto the concrete floor from the height of 1m 3 times. the device shall fulfill the specifications in 2.2.

#### 5-7 Vibration

Subject the device to the vibration for 1 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 Hz. The device shall fulfill the specifications in 2.2.

## 6. Remark

### 6.1 Static voltage

Static voltage between signal load & ground may cause deterioration & destruction of the component. Please avoid static voltage.

### 6.2 Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning

### 6.3 Soldering

Only leads of component may be soldered. Please avoid soldering another part of component.