

规格书编号

SPEC NO: HDR379.3MS6SP01

PRODUCT 产品:

# 产品规格书(预期) Preliminary SPECIFICATION

SAW RESONATOR

CUSTOMER 客 户:\_\_\_\_\_

MODEL NO 型 号:	HDR379.3M-S6					
PREPARED 编 制: _	CHECKED 审 核	:				
APPROVED 批 准:_	DATE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



## SAW RESONATOR

# 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



## 1. Scope

This specification shall cover the characteristics of 1-port SAW resonator with R379.3M used for remote-control security.

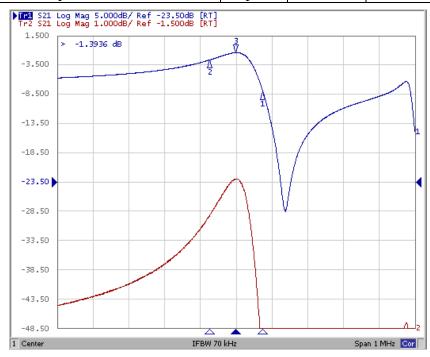
### 2. Electrical Specification

#### 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

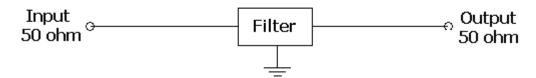
#### 2.2 Electronic Characteristics

Item		Unites	Minimum	Typical	Maximum	
Center Frequency		MHz	379.225	379.300	379.375	
Insertion Loss		dB		1.5	2.5	
Quality Factor		Unload Q		8000	12000	
		50Ω Loaded Q		800	2000	
Temperature	Turnover Temperature		$^{\circ}\mathbb{C}$	10	25	40
Stability	Freq.temp.Coefficient		ppm/℃		0.032	
Frequency Aging		ppm/yr		<±10		
DC. Insulation Resistance		ΜΩ	1.0			
Transducer Static Capacitance C0		pF		2.3		

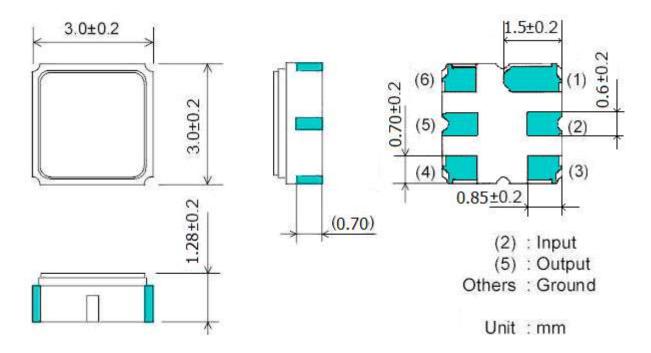




#### 3. Test Circuit



#### 4. Dimension



#### 5. Environment Characteristic

#### 5-1 High temperature exposure

Subject the device to  $+85^{\circ}$ 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  $-40^{\circ}$ C for 30 minutes. Following by a high temperature of  $+85^{\circ}$ 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  $260^{\circ}$ C  $\pm 10^{\circ}$ C for  $10\pm 1$  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  $\pm 5$ °C for 5s, More than 95%



#### **SAW RESONATOR**

#### HDR379.3M-S6

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.