

规格书编号

**SPEC NO:** 

# 产品规格书 SPECIFICATION

PRODUCT 产品:	SAW RESONATOR					
MODEL NO 型 号:	HDR433.65M-S6					
PREPARED 编 制:	CHECKED 审 相	亥:				
APPROVED 批准:	D A T E 日 其	明:				
客户确认 CUSTOMER RECEIVED:						
审核 CHECKED	批准 APPROVED	日期 DATE				

CUSTOMER 客 户:

# 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 R433.65M 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
Source Power	0dBm

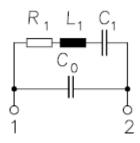
#### 2.2 Electronic Characteristics

Item		Unites	Minimum	Typical	Maximum	
Center Frequency		MHz	433.575	433.650	433.725	
Insertion Loss		dB		1.4	1.9	
Quality Factor		Unload Q		8000	12000	
		50Ω Loaded Q		850	1500	
Temperature	Turnov	Turnover Temperature		10	25	40
Stability Freq.ter		mp.Coefficient	ppm/℃		0.032	
Frequency Aging		ppm/yr		<±10		
DC. Insulation Resistance		MΩ	1.0			
RF	Motional Resistance R1		Ω		18	26
Equivalent	Motional Inductance L1		μН		79.82	
RLC Model	Motional Capacitance C1		fF		1.685	
Transducer Static Capacitance C0		pF		2.3		

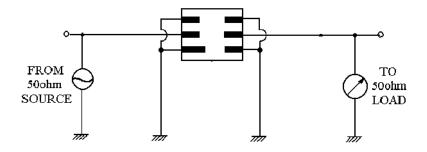




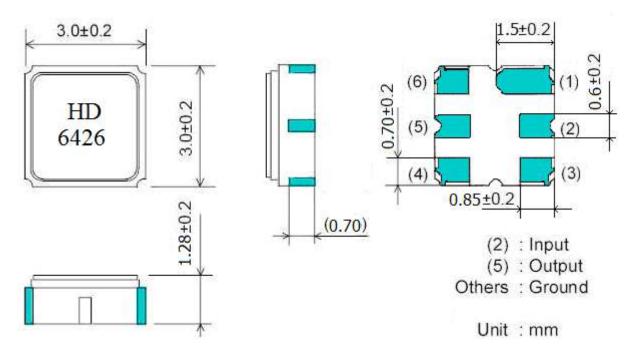
#### 2.3 Equivalent LC Model



### 3. Test Circuit



### 4. Dimension



1. **HD**: Manufacture's logo

2. 6426: Model code



SAW RESONATOR

#### 5. Environment Characteristic

#### 5-1 High temperature exposure

Subject the device to  $+85^{\circ}$ C for 16 hours. Then release the filter 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  $-40^{\circ}$ 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  $245^{\circ}$ C  $\pm 5^{\circ}$ 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.