

CUSTOMER 客户:

规格书编号

SPEC NO:

产品规格书 SPECIFICATION

PRODUCT 产品:	SAW RESONATOR				
MODEL NO 型 号:	HDR403.55M-S6				
PREPARED 编 制:	CHECKED 审 核:				
APPROVED 批 准:	DATE 日 其	明:2014-5-14			
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

SAW RESONATOR

1. SCOPE

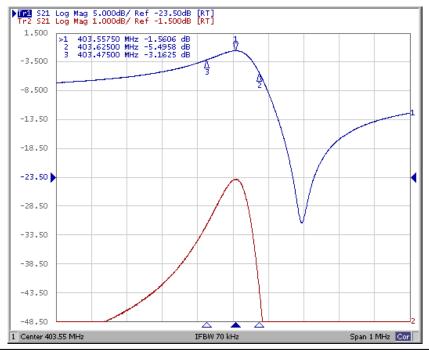
This specification shall cover the characteristics of 1-port SAW resonator with 403.55M used for remote-control security.

2. ELECTRICAL SPECIFICATION

DC Voltage VDC	10V		
AC Voltage Vpp	10V50Hz/60Hz		
Operation temperature	-20°C to +85°C		
Storage temperature	-45°C to +85°C		
RF Power Dissipation	0dBm		

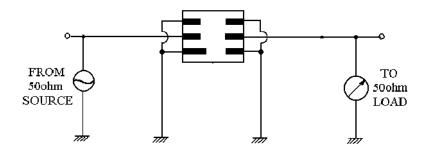
Electronic Characteristics

Item		Unites	Minimum	Typical	Maximum	
Center Frequency		MHz	403.475	403.550	403.625	
Insertion Loss		dB		1.5	2.5	
Ouality Factor		Unload Q		8000	12000	
		50Ω Loaded Q		800	1000	
Temperature			$^{\circ}$	10	25	40
Stability			ppm/℃		0.032	
Frequency Aging		ppm/yr		<±10		
DC. Insulation Resistance		MΩ	1.0			
RF	Motional Resistance R1		Ω		20	26
Equivalent	Motional Inductance L1		μН		92.287	
RLC Model	Motional Capacitance C1		fF		1.6854	
Transducer Static Capacitance C0		pF		2.0		

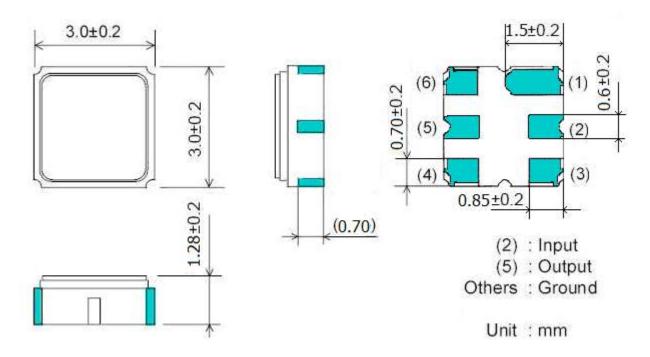




3. TEST CIRCUIT



4. DIMENSION



5. ENVIRONMENTAL CHARACTERISTICS

5-1 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of $+25^{\circ}\text{C}$ for 5 Minutes and a higher temperature of $+85^{\circ}\text{C}$ for 30 Minutes. Then release the device into the room conditions for 1 to 2 hours prior to the measurement. It shall meet the specifications in table 1.

5-2 Resistance to solder heat

Submerge the device terminals into the solder bath at $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 10 ± 1 sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in table 1.

5-3 Solderability

Submerge the device terminals into the solder bath at $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 5s, More than 95% area of the soldering pad must be covered with new solder. It shall meet the



SAW RESONATOR

specifications in table 1.

5-4 Mechanical shock

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

5-5 Vibration

Subject the device to the vibration for 2 hour each in x,y and z axes with the amplitude of 1.5 mm at 10 to 55 hz. The resonator shall fulfill the specifications in table 1.

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.