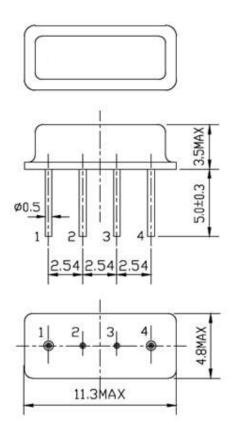


# IS SR F11

# 1. Package Dimension



Unit: mm



Pa	ckage Material	
CAP	Cu plating Ni	
BASE	Cu plating Ni	

Pin No. Function

- Input
- Ground
- Ground
- Output

# 2. Marking

IS SR	Item code		
433M92	Erequency		

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# 3. Performance

# 3.1 Application

One-port SAW Resonator for Wireless Remote Controller. Center frequency: 433.92MHz

3.2 Maximum Rating

man rading							
Rating	Value	Unit					
Operating Temperature Range	TA	-40 ~ +85	°C				
Storage Temperature Range	<b>J</b> .stg	-45 ~ +85	°C				
DC Voltage (between any Terminals)	<b>V</b> bc	10	V				
RF Power (in BW)	P	0	dBm				
ESD Voltage (HB)	VESD	150	V				

Electrostatic Sensitive Device (ESD)

#### 3.3 Electronic Characteristics

Item	Unit	Minimum	Typical	Maximum
Center Frequency (fo)	MHz	433.845	433.920	433.995
Insertion Loss	dB	_	1.5	2.5
Quality Factor	_	_	_	_
Unloaded Q	_	_	12,800	_
50Ω Loaded Q	_	_	2,000	_
Temperature Stability	_	_	_	_
Turnover Temperature		10	25	40
Turnover Frequency	KHz	_	fo±1.3	_
Frequency Temperature Coefficient	ppm/□2	_	0.032	_
Frequency Aging	ррт/уг	_	<±10	_
DC Insulation Resistance	МΩ	1.0	_	_
RF Equivalent RLC Model	_	_	_	_
Motional Resistance R <sub>1</sub>	Ω	_	18	26
Motional Inductance L <sub>1</sub>	Щ	_	75	_
Motional Capacitance C <sub>1</sub>	<u>tt.</u>	_	1.8	_
Pin1 to Pin2 Static Capacitance Co	pF	1.7	2.0	2.3
Transducer Static Capacitance Co	pF	_	2.3	_





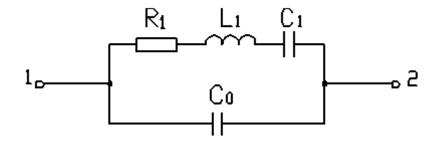
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### 3.3 Equivalent LC Model



#### 4. Performance

#### 4.1 Mechanical Shock:

The components shall remain within the electrical specifications after 1000 shocks, acceleration 392 m/s2, duration 6 milliseconds.

#### 4.2 Vibration Fatigue:

The components shall remain within the electrical specifications after loaded vibration at 20 Hz, amplitude 1.5 mm, for 2 hours.

#### 4.3 Terminal Strength:

The components shall remain within the electrical specifications after pulled 2 kgs weight for 10 seconds towards an axis of each terminal.

#### 4.4 High Temperature Storage:

The components shall remain within the electrical specifications after being kept at the 85°C±2°C for 16 hours, then kept at room temperature for 2 hours.

#### 4.5 Low Temperature Storage:

The components shall remain within the electrical specifications after being kept at the -20°C ± 2°C for 16 hours, then kept at room temperature for 2 hours.

## 4.6 Temperature Cycle:

The components shall remain within the electrical specifications after 5 cycles of high and low temperature testing (one cycle: 80°C for 30 minutes → 25°C for 5 minutes→ -40°C for 30 minutes )than kept at room temperature for 2 hours.

#### 4.7 Humidity Test:

The components shall remain within the electrical specifications after being kept at the condition of ambient temperature 40±2°C, and 90~95% RH for 48 hours, then kept at room temperature and normal humidity for 2 hours.

#### 4.8 Solder-heat Resistance:

The components shall remain within the electrical specifications after dipped in the solder at 260℃ for 10±1 seconds, then kept at room temperature for 2 hours. (Terminal must be dipped leaving 1.5 mm from the case).

#### 4.9 Solderability:

Solderability of terminal shall be kept at more than 80% after dipped in the solder flux at 245°C±5°C for 5±1 seconds.





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# 5. Remarks

# 5.1 Static voltage:

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

# 5.2 Ultrasonic cleaning:

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

# 5.3 Soldering:

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



