

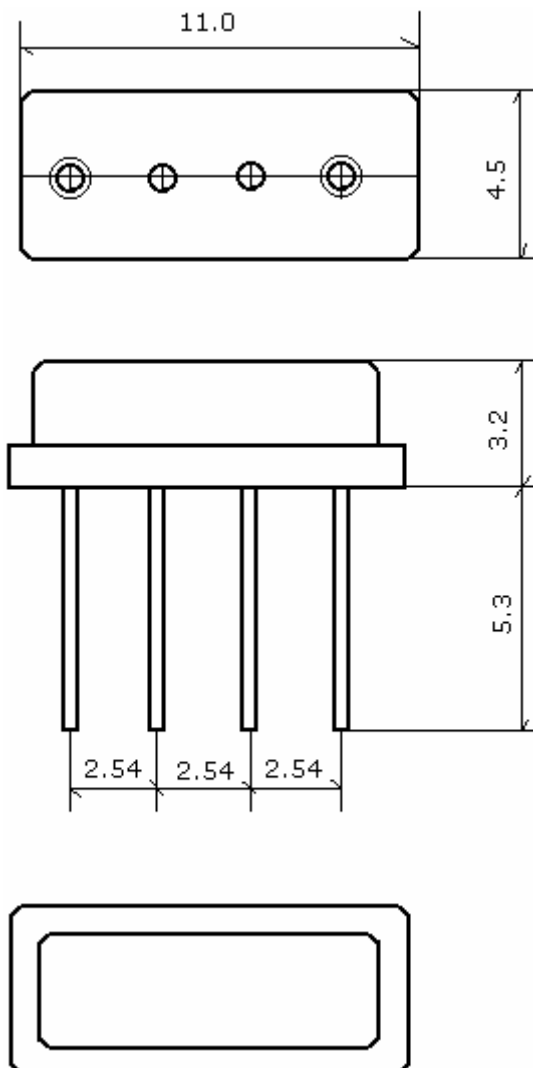
1.SCOPE

This specification is applied to a 2-PORT type SAW resonator designed for the stabilization of transmitters such as garage door openers and security transmitters.

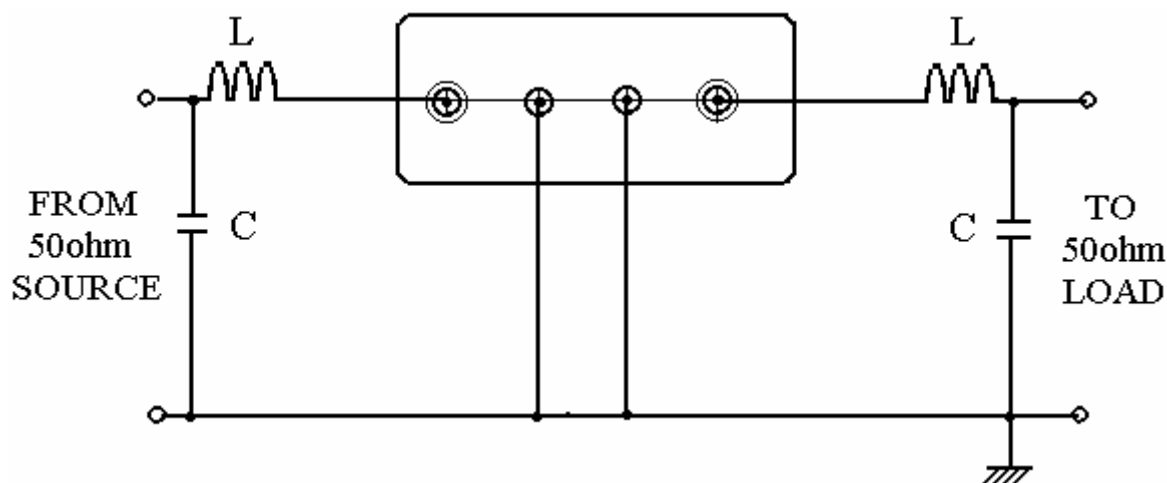
2. ELECTRICAL SPECIFICATION

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

3. DIMENSION



4. TEST CIRCUIT



5. Electrical characteristics

Part number		min	typ	max	unit
Center Frequency		Table 1			
Insertion Loss			7.0	8.0	dB
Quality Factor Unload Q			12.000		
50 Ω Loaded Q			6.300		
Temperature Stability	Turnover Temperature	36	51	66	°C
	Turnover Frequency		$f_0 \pm 11$		KHz
	Freq.temp.Coefficient		0.037		ppm/ °C ²
Frequency Aging			$< \pm 10$		ppm/ yr
DC. Insulation Resistance		1.0			M Ω
RF Equivalent RLC Model	Motional Resistance R1		107	152	Ω
	Motional Inductance L1		481.378		μ H
	Motional Capacitance C1		0.2794		pF
Shunt Static Capacitance			1.3		pF

Table 1

F ₀ (MHz)	Frequency accuracy (KHz)	F ₀ (MHz)	Frequency accuracy (KHz)
224.500	±75	414.000	±75
303.825	±75	418.000	±75
307.300	±75	423.220	±75
335.100	±75	433.420	±75
315.000	±75	434.920	±75
380.000	±75	437.000	±75
384.050	±75	447.000	±75
391.800	±75	479.000	±75
402.550	±75	824.250	±250
403.000	±75	868.500	±250

6. ENVIRONMENTAL CHARACTERISTICS

6-1 Temperature cycling

Subject the device to a low temperature of -40°C for 30 minutes. Following by a high temperature of +25°C for 5 Minutes and a higher temperature of +85°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.

6-2 Resistance to solder heat

Submerge the device terminals into the solder bath at 260°C ±5°C for 10±1 sec. Then release the device into the room conditions for 4 hours. It shall meet the specifications in table 1.

6-3 Solderability

Submerge the device terminals into the solder bath at 245°C ±5°C for 5s, More than 95% area of the soldering pad must be covered with new solder. It shall meet the specifications in table 1.

6-4 Mechanical shock

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

6-5 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 filter shall fulfill the specifications in table 1.

7. REMARK

7.1 Static voltage

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

7.2 Ultrasonic cleaning

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

7.3 Soldering

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