



1. SCOPE
The specification is applied to the ceramic filter used for SIF unit.
2. PART NO. : LTS6.0MCB
3. ELECTRICAL CHARACTERISTICS

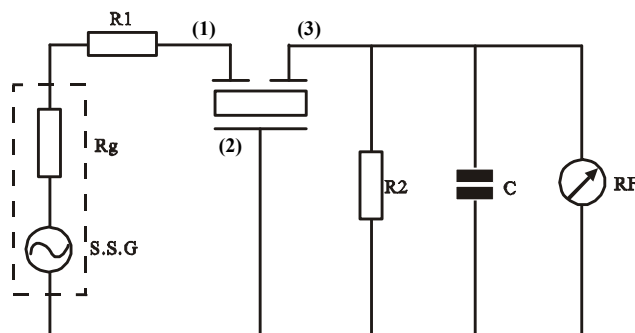
No.	Item	Requirements
3.1	Nominal Center Frequency (fn)	6.0MHz
3.2	3dB Bandwidth (from 5.8MHz)	±60KHz min.
3.3	20dB Bandwidth	600KHz max.
3.4	Insertion Loss (at minimum loss point)	6.0dB max. Calculation $20 \cdot \log\left(\frac{E1}{2 \cdot E2}\right)$
3.5	Spurious Response 0.0MHz—5.8MHz 5.8MHz—7.0MHz 7.0MHz—10.0MHz	30dB min. 15dB min. 30dB min.
3.6	Withstanding Voltage	DC 50V, 1 min.
3.7	Insulation Resistance	100MΩ min. (DC 100V)
3.8	Operation Temperature	-20□ to +80□
3.9	Input / Output Impedance	470Ω

4. MEASUREMENT

4.1 Measurement Condition

Parts shall be measured under a condition (Temp:5~35°C, Humi:45~85%) unless any necessary to measure under a standard condition (Temp.: 20±2°C. Humi: 65±5%) is occurred.

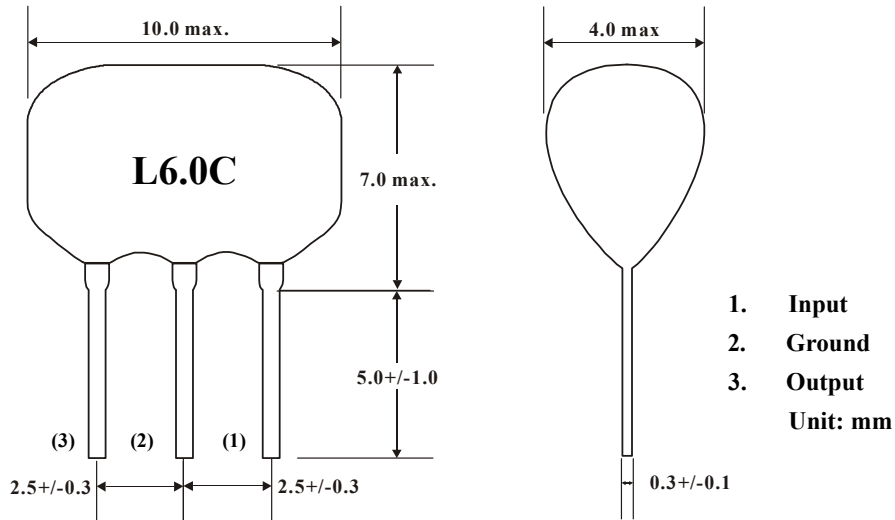
5. MEASUREMENT CIRCUIT



$R_g + R_1 = R_2 = \text{Input/Output Impedance}$
 $C = 10\text{pF}$
 (Including Stray capacitance and input capacitance of RF voltmeter)



6. DIMENSIONS



7. PHYSICAL AND ENVIRONMENT CHARACTERISTICS

No.	Item	Condition of Test	Performance Requirement
7.1	Humidity	Subject the filter at $+40\pm 2^{\circ}\text{C}$ and 90%-95% R.H. for 500 hours, filter shall be measured after being placed in natural condition for 1 hour.	It shall fulfill the specification in Table 1.
7.2	High Temperature Exposure	Subject the filter to $+85^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 500 hours, filter shall be measured after being placed in natural condition for 1 hour.	It shall fulfill the specification in Table 1.
7.3	Low Temperature Exposure	Subject the filter to $-25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for 500 hours, filter shall be measured after being placed in natural condition for 1 hour.	It shall fulfill the specification in Table 1.
7.4	Temperature Cycling	Subject the filter to -25°C for 30 min. followed by a high temperature of $+85^{\circ}\text{C}$ for 30 min. Cycling shall be repeated 5 times. Filter shall be measured after being placed in natural conditions for 1 hour.	It shall fulfill the specification in Table 1.
7.5	Vibration	Subject the filter to vibration for 2 hours each in X,Y and Z axis with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10Hz-55Hz.	It shall fulfill the specification in Table 1.
7.6	Mechanical Shock	Filter shall be measured after 3 times random dropping from the height of 100cm on concrete floor	It shall fulfill the specification in Table 1.
7.7	Resistance to Solder Heat	Lead terminals are immersed up to 2 mm from filter's body in soldering bath of $260\pm 5^{\circ}\text{C}$ for 5 ± 1 seconds and then filter shall be measured after being placed in natural conditions for 1 hour.	It shall fulfill the specification in Table 1.
7.8	Solder-ability	Lead terminals are immersed up to 2mm from filter's body in soldering bath of $235\pm 5^{\circ}\text{C}$ for 2 ± 0.5 sec.	More than 95% of the surface of the resonator terminal shall be covered with fresh solder.



7.9 LEAD FATIGUE

No.	Item	Condition of Test	Performance Requirement
7.9	Lead Fatigue		
7.9.1	Pulling Test	Force of 5N is applied to each lead in axial direction for 10±1 sec.	The filter shall show no evidence of damage and shall fulfill all the initial electric characteristics.
7.9.2	Bending Test	When force of 5N is applied to each lead in axial direction , the lead shall folded up 90°C from the axial direction	

Table 1.

ITEM	SPECIFICATION
3dB Band Width	25KHz max.
20dB Band Width	40KHz max.
Insertion Loss	2.0dB max.

8. REVIEW OF SPECIFICATION

When something gets doubtful with this specification, we shall jointly work to get an agreement.