

**1. SCOPE**

This Specification Shall Cover The Characteristics Of The Ceramic Filter With 10.7mhz, For Fm Receiver.

**2. Specification No:**
**3. Part Number: LT10.7MS3A10**
**4. Electronical Characteristics**

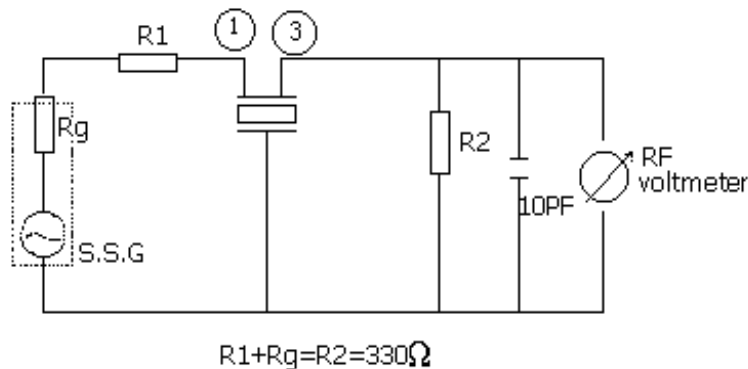
- |  |                     |
|--|---------------------|
| A. 3dB and Width (Khz)                                       | 180±40              |
| B. 20dB and Width (Khz)                                      | 470 Max             |
| C.Insertion Loss (dB)  | 3.5±1.5max.         |
| D. Spurious Attenuation (dB)                                 | 35 Min.             |
| E. Temperature Coefficient Of Center Frequency(-20 To +80°C) | ±100ppm/°C Max      |
| F. withstanding voltage                                      | 50V Ds for 1 minute |
| G. Standard Rule :   |                     |

**TABLE 1**

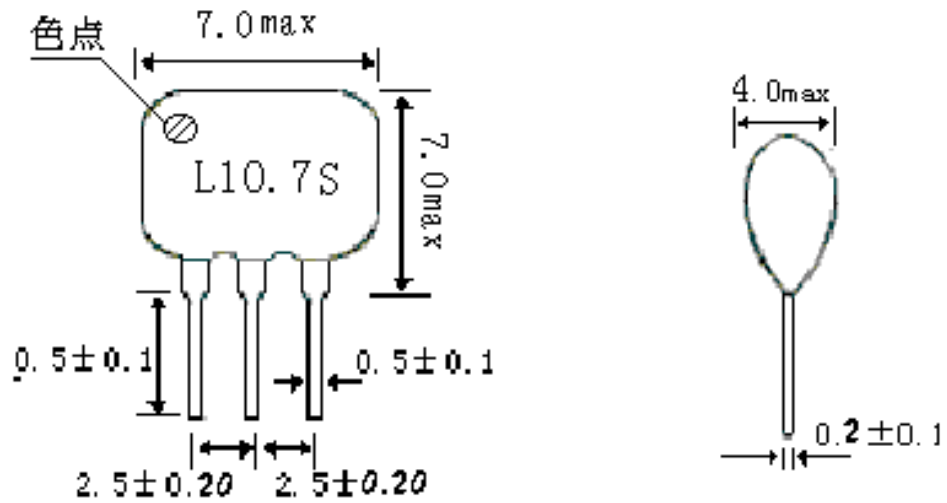
Center frequency	D 10.64MHz ±30KHz	B 10.67MHz ±30KHz	A 10.70MHz ±30KHz	C 10.73MHz ±30KHz	E 10.76MHz ±30KHz
Color	Black	Bule	Red	Orange	White

**5. MEASUREMENT**

- A. Measurement Shall Be Carried Out At The Reference Temperature Of 25°C ±2°C. It Shall Be Possibly Done At 15°C To 35°C unless It Is Questionable.

**B. TEST CIRCUIT**


(Inclding stay capacitance and input capacitance of RF voltmeter)

**6. DIMENSIONS(mm)**

**7. ENVIRONMENTAL CHARACTERISTICS**
**7-1 IGH TEMPERATURE EXPOSURE**

subject the filter to +80°C for 24 hours. then release the filter into room condition for 4 hours prior to measurement , it shall fulfill the the specifications in table 2.

**7-2 MOISURE**

keep the filter at 40°C and 95%RH for 24 hours, then release the filter into the room conditions for 2 to hours prior to the measurement. it shall fulfill the specifications in table 2.

**7-3 Low Temperature**

subject the filter to -20°C for 24 hours. then release the filter into the room conditions for 4 hours prior to the measurement. it shall fulfill the specifications in table 2.

**7-4 TEMPERATURE CYCLING**

subject the filter to alow temperature of -20°C for 30 minutes. following by a high temperature of +80°C for 30 minutes. then release the filter into the room conditions for 1 to 2 hours prior to the mesurement. it shall meet the specifications in table 2.

**7-5 RESISTANCE TO SOLDER HEAT**

dip the filter terminals no closer than 1.5mm into the solder bath at 260°C ±10°C for 5 ± 0.5 sec. then release the filter in to he room conditions for 24 hours. the filter shall meet the specifications in table 2.

**7-6 MECHANICAL SHOCK**

drop the fil ter randomly onto the concrete floor from the height of 1 meter 3 times. it shall fulfill the specifications in table 2.

**7-7 VIBRATION**

subject the filter to vibration each in x,y and z axes with the amplitude of 1.5mm for 2 hours each direction, the frequency shall be varied uniformly between the limits of 10 to 50HZ, then release the filter into room condition for 2 hours prior to the measurement. It shall fulfill specifications in table 2

**7-8 SOLDERABILITY**

dip the filter terminals no closer than 2 mm into the solder bath at  $235\pm 5^{\circ}\text{C}$  for  $2\pm 0.5$ sec. more than 95% of the terminal surface of the filter shall be covered with fresh solder.

**7-9 LEAD FATIGUE**
**7-9-1 pulling test**

weight along with the direction of lead without a shock 0.5 kg. the filter shall satisfy all the initial characteristics.

**7-9-2 bending test**

lead shall be subject to withstand against  $90^{\circ}\text{C}$  bending in the direction of thickness. this operation shall be done toward both directions. the filter shall show no evidence of damage and shall satisfy all the initial electrical characteristics

TABLE 2

item	Limit value
3dB Band Width drift	$\pm 40.0\text{KHZ}$ max
20dB Band Width drift	$\pm 60.0\text{KHZ}$ max
Insertion loss drift	2.0 dB max

**8 REVIEW OF SPECIFICATION**

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