

# http://www.luguang.cn Email: lge@luguang.cn

# 1. SCOPE

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

2. Specification No:

3. Part Number: LT10.7MJ10

**Electronical Characteristics** 4.

> A. 3dB and Width (Khz)  $150 \pm 40$ 20dB and Width (Khz) 360 Max C.Insertion Loss (dB) 4.5±2.0max.

D. Spurious Attenuation (dB)

35 Min.

E. Temperature Coefficient Of Center Frequency( $-20 \text{ To } +80^{\circ}\text{C}$ )

 $\pm 100$ ppm/°C Max

withstanding voltage F.

50V Ds for 1 minute

Standard Rule:

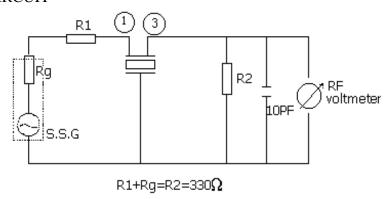
TABLE 1

Center	D	В	A	С	Е
frequency	10.64MHz	10.67MHz	10.70MHz	10.73MHz	10.76MHz
	±30KHz	±30KHz	±30KHz	±30KHz	±30KHz
Color	Black	Bule	Red	Orange	White

# 5. MEASUREMENT

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

# B. TEST CIRCUIT



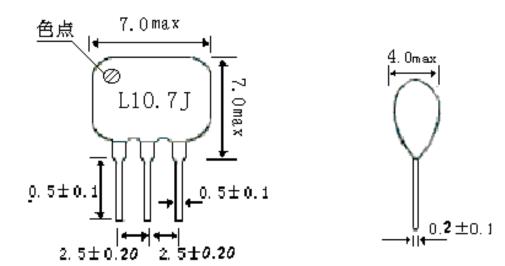
(Inclding stay capacitance and input capacitance of RF voltmeter)

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#### 6. DIMENSIONS(mm)



#### 7. ENVIRONMENTAL CHARACTERISTICS

#### 7-1 IGH TEMPERATURE EXPOSURE

subject the fitter to  $+80\,^{\circ}\text{C}$  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  $40^{\circ}$ 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  $-20^{\circ}$ C for 24 hours. then release the filter into the room conditions for 4 hours prior to the measurement. it shall fulfill the specific ations in table 2.

#### 7-4 TEMPERATURE CYCLING

subject the filter to alow temperature of  $-20^{\circ}$ C for 30 minutes. followsing by a high temperature of  $+80^{\circ}$ 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  $260^{\circ}\text{C}$   $\pm 10^{\circ}\text{C}$  for  $5\pm 0.5$  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.

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# 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 SOLDERABLLITY

dip the filter terminals no closer then 2 mm into the solder bath at  $235\pm5$  °C for  $2\pm0.5$ sec. more then 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 an shock 0.5 kg. the filter shall satisfy all the initiall characteristics.

# 7-9-2 bending test

lead shall be subject to withstand against 90°C bending in the derection of thickness, this operation shall be done toward both direction, the fil ter shall show noevidence of damage and shall satisfy all the initial electric all characteristics

TABLE 2

item	Limit valae	
3dB Band Width drift	±40.0KHZ max	
20dB Band Width drift	±60.0KHZ 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.