

LT10.7 Series

& Feature:

LT10.7M Series of Ceramic Filter For FM Receiver

& Electrical Specifications

LT10.7M Series of Ceramic Filter For FM Receiver

Part Number	3dB Band Width (kHz)	20dB Band Width (kHz)max	Insertion Loss (dB)max	Spurious Attenuation (9-12MHz)(dB)min
LT10.7MA5	280±50	650	6	30
LT10.7MS2	230±50	600	6	40
LT10.7MS3	180±40	520	7	40
LT10.7MJ	150±40	400	10	38

LT10.7M□A10 Series of Ceramic Filter (Low-Loss Type)

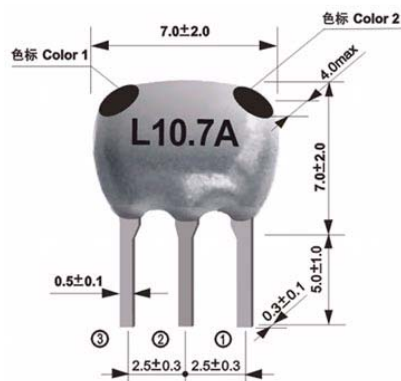
Part Number	3dB Band Width (kHz)	20dB Band Width (kHz)max	Insertion Loss (dB)max	Spurious Attenuation (9-12MHz)(dB)min
LT10.7MA5A10	280±50	590	2.5±2.0	30
LT10.7MS2A10	230±50	520	3.0±2.0	35
LT10.7MS3A10	180±40	470	3.5±1.5	35
LT10.7MJA10	150±40	360	4.5±2.0	35

*Input/Output Impedance: 330Ω

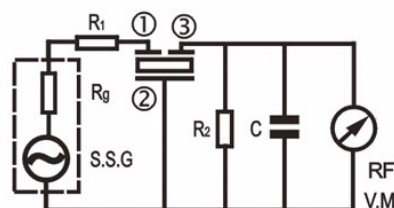
Wide/Narrow Band-width Type LT10.7M series of Ceramic Resonator

Part Number	3dB Band Width (kHz)	20dB Band Width (kHz)max	Insertion Loss (dB)max	Spurious Attenuation (9-12MHz)(dB)min
LT10.7MA19	350min	950	3±2	20
LT10.7MA20	330±50	680	4±2	30
LT10.7MHY	110±30	350	7±2	30
LT10.7MFP	20min	95	6.0max	24

& Dimension:



Input (2)Ground (3)Output
Color1:MA5.MS2.MJA10
Color2:MS3.MJ.MHY



$R_g + R_1 = R_2 = 330\Omega$ $C = 10\text{PF}$
Including stray capacitance and
input capacitance of RF voltmeter

&Standard Rule

Center Frequency	Color
D:10.64MHz $\pm$ 30kHz	Black
B:10.67MHz $\pm$ 30kHz	Blue
A:10.70MHz $\pm$ 30kHz	Red
C:10.73MHz $\pm$ 30kHz	Orange
E:10.76MHz $\pm$ 30kHz	White

& Physical and Environmental Characteristics:

NO	Item	Condition of Test	Performance Requirements
7.1	Humidity	Keep the filter at 40 $\pm$ 2 $^{\circ}\text{C}$ and 90-95% RH for 96 $\pm$ 4 hours. Then release the filter into the room condition for 1 hour prior to the measurement.	It shall fulfill the specifications in Table1.
7.2	High Temperature Exposure	Subject the filter to 80 $\pm$ 5 $^{\circ}\text{C}$ for 96 $\pm$ 4 hours. Then release the filter into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specification in Table 1.
7.3	Low Temperature	Subject the filter to -20 $\pm$ 5 $^{\circ}\text{C}$ for 96 $\pm$ 4 hours. Then release the filter into the room conditions for 1 hour prior to the measurement.	It shall fulfill the specification in Table 1.
7.4	Temperature Cycling	Subject the filter to -20 $^{\circ}\text{C}$ for 30 min.followed by a high temperature of 70 $^{\circ}\text{C}$ for 70 min.Cycling shall be repeated 5 times with a transfer time of 15 min.at the	It shall fulfill the specification in Table 1.

		room condition. Then release the filter into the room temperature for 1 hour prior to the measurement.	
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 10--55Hz	It shall fulfill the specification in Table 1.
7.6	Mechanical Shock	Drop the filter randomly onto a concrete floor from the height of 1 meter 3 times.	It shall fulfill the specification in Table 1.
7.7	Resistance to Solder Heat	Dip the filter terminals no closer than 2 mm into the solder bath at $260 \pm 10^{\circ}\text{C}$ for 3 ± 0.5 sec.	It shall fulfill the specification in Table 1.
7.8	Solderability	Dip the filter terminals no closer than 2 mm into the solder bath at $235 \pm 5^{\circ}\text{C}$ for 3 ± 0.5 sec.	More than 95% of the terminal surface of the filter shall be covered with fresh solder.
7.9	Lead Fatigue (1) Pull Test	Weight along with the direction of terminals without any shock 5 Newton for 10 sec.	The filter shall show no evidence of damage and shall fulfill all the initial electric characteristics
	(2) Bending Test	Lead shall be subject to Withstand against 90 degree bending At its stem. This operation shall be done towards both directions.	

TABLE 1

ITEM	SPECIFICATIONS
Center Frequency Shift	30KHz max.
Insertion Loss Shift	2 dB max.
3 dB Band Width	20KHz max.
20dB Band Width	30KHz max.