



LT10.7 Ceramic Filter / 陶瓷滤波器

LT10.7 Series Filter are monolithic devices which utilize the energy-trapped thickness vibration-mode. This principle of operation is based upon the fact that an excellent resonating element with low spurious vibration can be obtained by adhering to certain theoretical parameters of design. These parameters include the physical dimensions of the ceramic element, the electrode pattern, and the associated mass loading effect of the electrodes. In addition to employing the principle of energy-trapped thickness shear vibration-mode, Token also utilizes the theory of the multicoupling mode. In short, this theory utilizes divided electrodes to “trap” different frequencies simultaneously. The advantages of Token’s multicoupling mode technology is a highly selective, integrated device that allows a single piezo substrate to contain a number of coupled resonators. Token categorizes the LT 10.7 family according to rank of center frequency. This ranking indicates that a given LT 10.7 will be marked with one of the colors listed in the following chart and will exhibit the center frequency characteristics specified below.

▶ **LT10.7M Series For FM Receiver(Murata SFE10M7 FM-IF Series Compatible) 10.7MHz**

Ceramic LT10.7M Series Technical Characteristics

| 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 |

• Input/Ouput Impedance:330Ω

▶ **LT10.7M A10 Series Low - Loss Type(Murata SFE10M7 A10 Series Compatible) 10.7MHz**

Ceramic LT10.7M A10 Series Technical Characteristics

| PartNumber | 3dB Band Width(kHz) | 20dB Band Width(kHz) max | Insertion Loss(dB) | 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/Ouput Impedance:330Ω

▶ **Wide/Narrow Band-width LT10.7M Series(Murata SFE10M7 DBS Receiver Compatible) 10.7MHz**

Ceramic LT10.7M Series Technical Characteristics

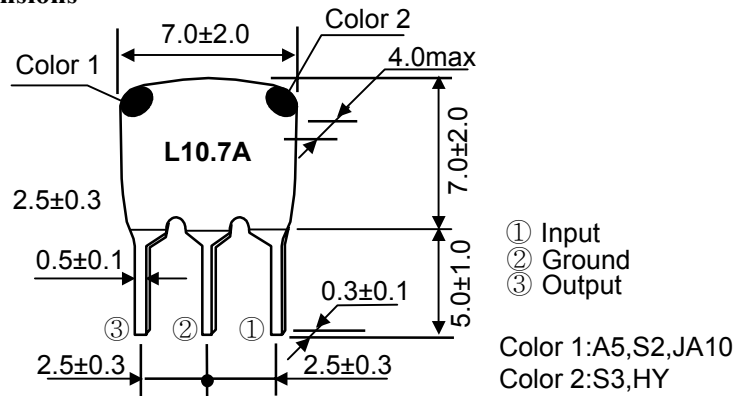
| Part Number | 3dB Band Width (kHz) | 20dB Band Width (kHz) max | Insertion Loss (dB) | Spurious Attenuation (9-12MHz)(dB)min |
|-------------|----------------------|---------------------------|---------------------|---------------------------------------|
| LT10.7MA19 | 350min | 950 | 3.0±2.0 | 20 |
| LT10.7MA20 | 330±50 | 680 | 4.0±2.0 | 30 |
| LT10.7MHY | 110±30 | 350 | 7.0±2.0 | 30 |
| LT10.7MFP | 20min | 95 | 6.0max | 24(10.7±1.0MHz) |

• Input/Ouput Impedance:470Ω(MA19),330Ω(MA20,MHY),600Ω(MFP)

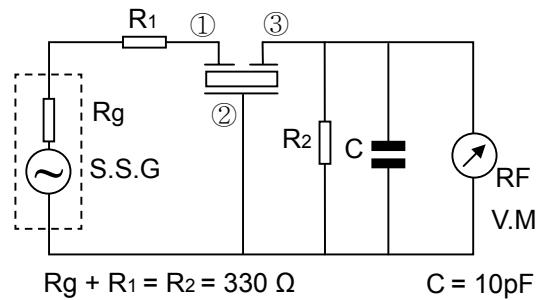


Filters

▶ LT10.7M Filter Dimensions



▶ LT10.7M Filter Test Circuit

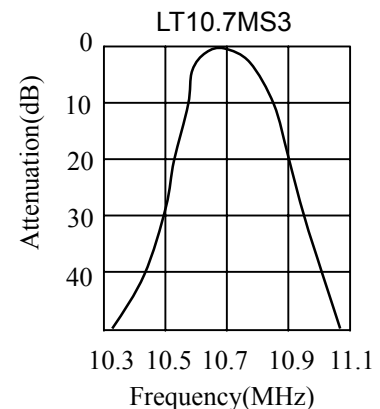
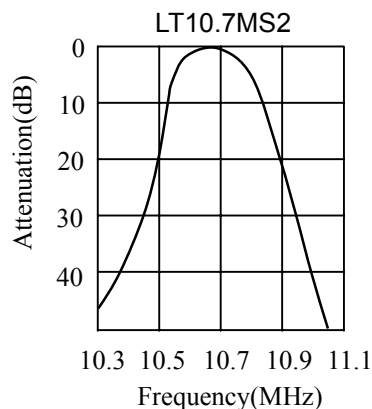
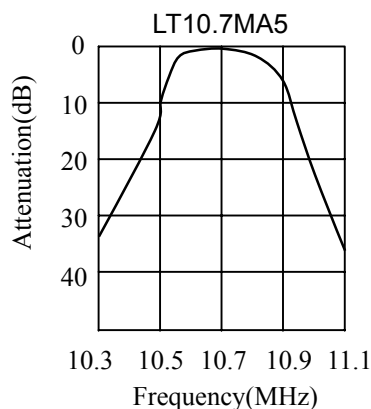


Including stray capacitance and input capacitance of RF voltmeter

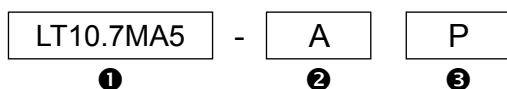
▶ LT10.7M Filter Standard Marking Color

| Center Frequency | Color |
|------------------|--------|
| D:10.64MHz±30kHz | Black |
| B:10.67MHz±30kHz | Blue |
| A:10.70MHz±30kHz | Red |
| C:10.73MHz±30kHz | Orange |
| E:10.76MHz±30kHz | White |

▶ LT10.7M Filter Characteristics



▶ How to Order



① Part Number

② Center Frequency color code

③ Packaging