# $\mathsf{CERAFIL}^{\textcircled{R}}$ (Filters/Traps/Discriminators) for Audio/Visual Equipment

# muRata

# CERAFIL<sup>®</sup> 10.7MHz Low Loss Type

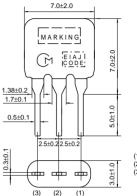
SFELA10M7 series for FM-receivers are monolithic type ceramic filters which use the thickness expander mode of the piezoelectric ceramic.

### Features

- 1. Insertion loss is 1 to 1.5dB lower than conventional products. These types are useful for elevating the sensitivity of sets.
- 2. Small dispersion and stable characteristics
- 3. Excellent shape factor of frequency response
- 4. Good waveform symmetry

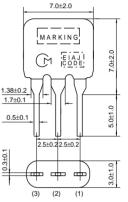


SFELA10M7JAA0-B0



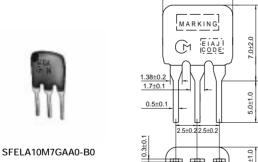
(1) : Input (2) : Ground (3) : Output (in mm) 5





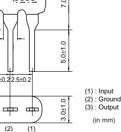


SFELA10M7HAA0-B0



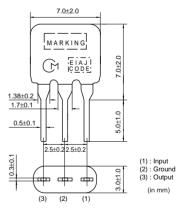
(3)

7.0+2.0



111

SFELA10M7FAA0-B0



| Part Number      | Center<br>Frequency (fo)<br>(MHz) | 3dB Bandwidth<br>(kHz) | Attenuation<br>(kHz) | Insertion<br>Loss<br>(dB) | Spurious<br>Attenuation<br>(dB) | Input/Output<br>Impedance<br>(ohm) |
|------------------|-----------------------------------|------------------------|----------------------|---------------------------|---------------------------------|------------------------------------|
| SFELA10M7JAA0-B0 | 10.700 ±30kHz                     | 150 ±40kHz             | 360 max.             | 4.5 ±2.0dB                | 35 min.                         | 330                                |
| SFELA10M7HAA0-B0 | 10.700 ±30kHz                     | 180 ±40kHz             | 470 max.             | 3.5 ±1.5dB                | 35 min.                         | 330                                |
| SFELA10M7GAA0-B0 | 10.700 ±30kHz                     | 230 ±50kHz             | 520 max.             | 3.0 ±2.0dB                | 35 min.                         | 330                                |
| SFELA10M7FAA0-B0 | 10.700 ±30kHz                     | 280 ±50kHz             | 590 max.             | 2.5 ±2.0dB                | 30 min.                         | 330                                |

Attenuation Bandwidth : at 20dB loss point Area of Spurious Attenuation : [within 9MHz to 12MHz]

Insertion Loss: at minimum loss point

Center frequency (fo) defined by the center of 3dB bandwidth.

The order quantity should be an integral multiple of the "Minimum Quantity" shown in the package page.

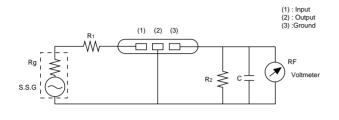


#### P50E.pdf 03.4.16

#### ■ Standard Center Frequency Rank Code

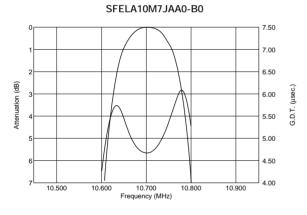
| Standard Center Frequency Rank Code |                       |                 |            |  |  |  |  |
|-------------------------------------|-----------------------|-----------------|------------|--|--|--|--|
| CODE                                | 30kHz Step            | 25kHz Step      | Color Code |  |  |  |  |
| D                                   | 10.64MHz±30kHz        | 10.650MHz±25kHz | Black      |  |  |  |  |
| В                                   | 10.67MHz±30kHz        | 10.675MHz±25kHz | Blue       |  |  |  |  |
| Α                                   | 10.70MHz±30kHz        | 10.700MHz±25kHz | Red        |  |  |  |  |
| С                                   | 10.73MHz±30kHz        | 10.725MHz±25kHz | Orange     |  |  |  |  |
| Е                                   | 10.76MHz±30kHz        | 10.750MHz±25kHz | White      |  |  |  |  |
| Z                                   | Combination A,B,C,D,E |                 |            |  |  |  |  |
| м                                   | Combination A,B,C     |                 |            |  |  |  |  |
|                                     |                       |                 |            |  |  |  |  |

### ■ Test Circuit

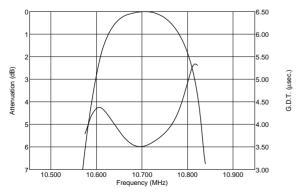


 $\begin{array}{l} Rg+R_1=R_2=Input \mbox{ and } Output \mbox{ Impedance } \\ C=10pF \mbox{ (Including stray capacitance and input capacitance of RF voltmeter.)} \end{array}$ 

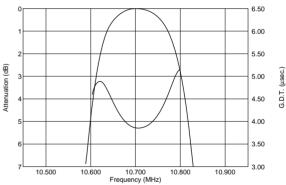
# ■ Frequency Characteristics



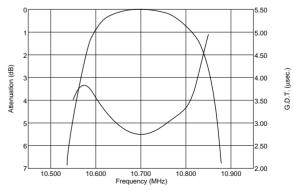




SFELA10M7HAA0-B0



SFELA10M7FAA0-B0



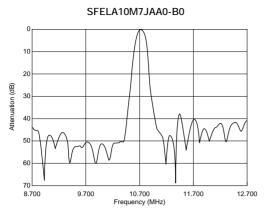


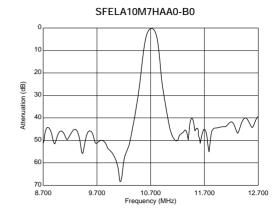


18

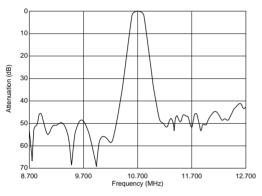


## ■ Frequency Characteristics (Spurious)

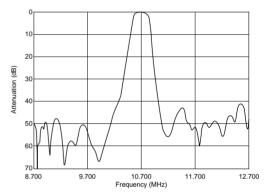




SFELA10M7GAA0-B0



SFELA10M7FAA0-B0



5

