

# CERAFIL® (Filters/Traps/Discriminators) for Audio/Visual Equipment



## CERAFIL® 10.7MHz Standard Lead Type

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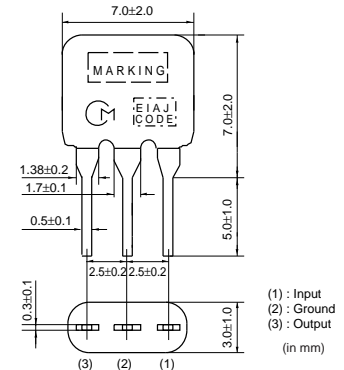
SFELA10M7 series for FM-receivers are monolithic type ceramic filters which use the thickness expander mode of the piezoelectric ceramic.

### ■ Features

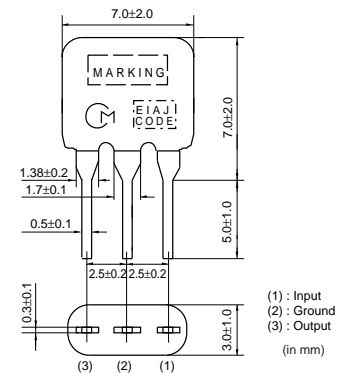
1. These miniature filters have high mechanical strength.
2. Low loss, favorable waveform symmetry, and high selectivity
3. Various band widths are available for applications in wide to narrow bands.
4. Small dispersion and stable characteristics
5. Change in center frequency is typically within  $\pm 30\text{ppm}/(\text{degree C})$  at  $-20$  to  $+80$  (degree C).
6. High reliability



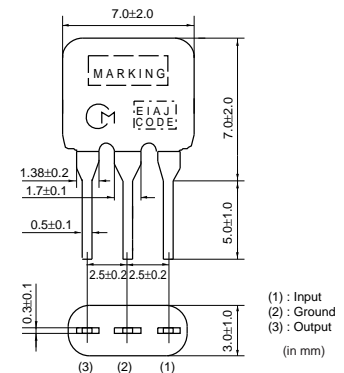
SFELA10M7HA00-B0



SFELA10M7GA00-B0



SFELA10M7FA00-B0



Part Number	Center Frequency (fo) (MHz)	3dB Bandwidth (kHz)	Attenuation (kHz)	Insertion Loss (dB)	Spurious Attenuation (dB)	Input/Output Impedance (ohm)
SFELA10M7HA00-B0	10.700 ±30kHz	180 ±40kHz	520 max.	7.0 max.	40 min.	330
SFELA10M7GA00-B0	10.700 ±30kHz	230 ±50kHz	570 max.	4.0 ±2.0dB	40 min.	330
SFELA10M7FA00-B0	10.700 ±30kHz	280 ±50kHz	650 max.	4.0 ±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.

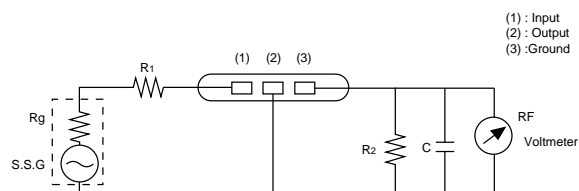
The order quantity should be an integral multiple of the "Minimum Quantity" shown in the package page.

## Standard Center Frequency Rank Code

CODE	30kHz Step	25kHz Step	Color Code
<b>D</b>	10.64MHz±30kHz	10.650MHz±25kHz	Black
<b>B</b>	10.67MHz±30kHz	10.675MHz±25kHz	Blue
<b>A</b>	10.70MHz±30kHz	10.700MHz±25kHz	Red
<b>C</b>	10.73MHz±30kHz	10.725MHz±25kHz	Orange
<b>E</b>	10.76MHz±30kHz	10.750MHz±25kHz	White
<b>Z</b>	Combination A,B,C,D,E		
<b>M</b>	Combination A,B,C		

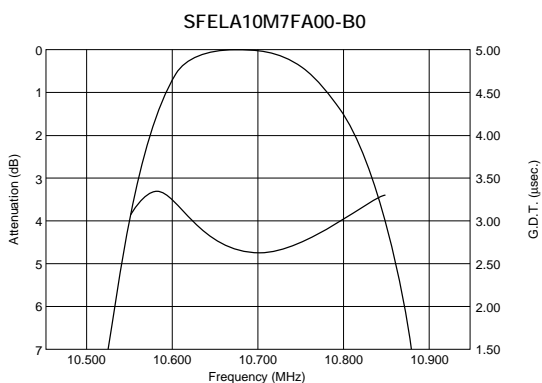
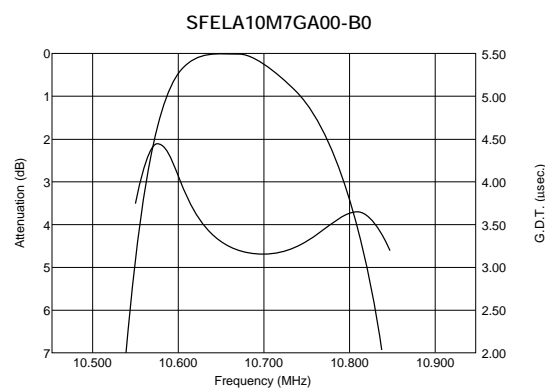
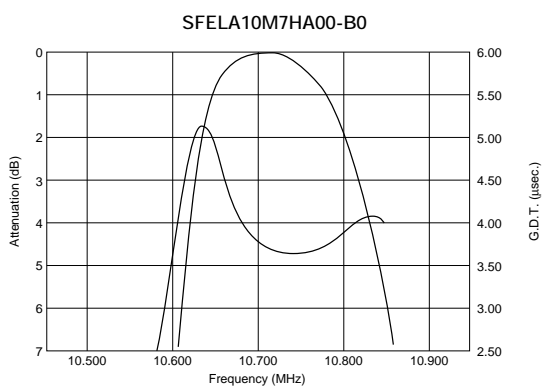
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## Test Circuit



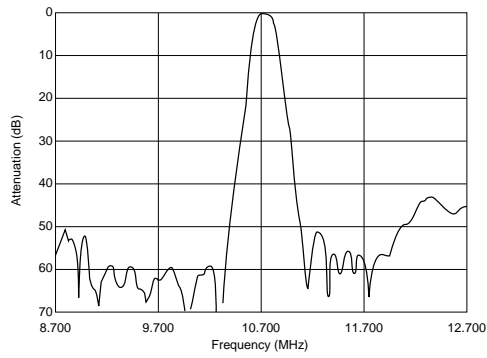
$R_g + R_1 = R_2 =$  Input and Output Impedance  
 $C = 10\text{pF}$  (Including stray capacitance and input capacitance of RF voltmeter.)

## Frequency Characteristics

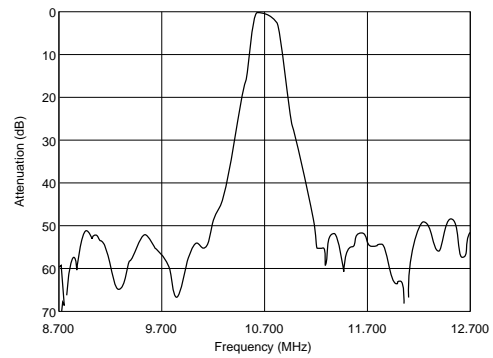


## ■ Frequency Characteristics (Spurious)

SFELA10M7HA00-B0



SFELA10M7GA00-B0



SFELA10M7FA00-B0

