## CERAFIL ${ }^{\circledR} 10.7 \mathrm{MHz}$ for FM-IF Tuners

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

## Features

1. Little dispersion of amplitude characteristics and phase characteristics (G. D. T. characteristics)
2. The SFELA10M7G_X series has G. D. T. characteristics and is useful for obtaining low distortion. SFELA10M7F_L series, in these ceramic filters, being in harmony with flatness of G. D. T., roundness of the amplitude and selectivity characteristics, therefore, these ceramic filters are suitable to high-grade stereo tuners. Even in mismatching conditions, they can keep little distortion because of low Qm of ceramic material. The SFELA10M7FA0G series is based on SFELA10M7FA00/GA00/HA00, and it obtains high selectivity with low loss.
There is little dispersion of amplitude and G. D. T. characteristics, and low distortion rate can be obtained.
3. All products are inspected the flatness of G. D. T. characteristics.


Continued from the preceding page.


SFELA10M7GALM-B0


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

## 10



SFELA10M7FALL-B0

: Input
(2) : Ground
(2) : Ground
(in mm)

SFELA10M7GA0G-B0


SFELA10M7FA0G-B0

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

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

| Part Number | $\begin{gathered} \text { Center } \\ \text { Frequency (fo) } \\ (\mathrm{MHz}) \end{gathered}$ | 3dB Bandwidth (kHz) | Attenuation (kHz) | $\begin{gathered} \hline \text { Insertion } \\ \text { Loss } \\ \text { (dB) } \\ \hline \end{gathered}$ | Spurious Attenuation (dB) | GDT Bandwidth (kHz) | Input/Output Impedance (ohm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SFELA10M7JAXE-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $150 \pm 30 \mathrm{kHz}$ | 500 max. | 14.0 max. | 35 min . | fo $\pm 50$ min.[within $0.15 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7HAXD-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $180 \pm 30 \mathrm{kHz}$ | 530 max. | 14.0 max. | 33 min . | fo $\pm 60$ min.[within $0.15 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7HA0G-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $180 \pm 40 \mathrm{kHz}$ | 520 max. | 7.0 max. | 40 min . | fo $\pm 45 \mathrm{~min}$.[within $0.5 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7GAXX-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $250 \pm 40 \mathrm{kHz}$ | 670 max. | 12.0 max. | 25 min . | fo $\pm 110$ min.[within $0.2 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7GAXA-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $220 \pm 40 \mathrm{kHz}$ | 610 max. | 12.5 max. | 30 min . | fo $\pm 80$ min.[within $0.15 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7GALP03-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $250 \pm 50 \mathrm{kHz}$ | 650 max. | 10.0 max. | 30 min . | fo $\pm 65 \mathrm{~min}$.[within $0.25 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7GALM-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $230 \pm 50 \mathrm{kHz}$ | 600 max. | $9.0 \pm 2.0 \mathrm{~dB}$ | 30 min . | fo $\pm 60 \mathrm{~min}$.[within $0.25 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7GA0G-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $230 \pm 50 \mathrm{kHz}$ | 600 max. | 7.0 max. | 40 min . | fo $\pm 60 \mathrm{~min}$.[within $0.5 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7FALL-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $280 \pm 50 \mathrm{kHz}$ | 700 max. | $7.0 \pm 2.0 \mathrm{~dB}$ | 25 min . | fo $\pm 70$ min.[within $0.25 \mu \mathrm{sec}$.] | 330 |
| SFELA10M7FA0G-B0 | $10.700 \pm 30 \mathrm{kHz}$ | $280 \pm 50 \mathrm{kHz}$ | 650 max. | $4.0 \pm 2.0 \mathrm{~dB}$ | 30 min . | fo $\pm 85 \mathrm{~min}$.[within $0.5 \mu \mathrm{sec}$.] | 330 |

Attenuation Bandwidth : at 20dB loss point Area of Spurious Attenuation: [within 9 MHz to 12 MHz ]
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 |
| :---: | :---: | :---: | :---: |
| D | $10.64 \mathrm{MHz} \pm 30 \mathrm{kHz}$ | $10.650 \mathrm{MHz} \pm 25 \mathrm{kHz}$ | Black |
| B | $10.67 \mathrm{MHz} \pm 30 \mathrm{kHz}$ | $10.675 \mathrm{MHz} \pm 25 \mathrm{kHz}$ | Blue |
| A | $10.70 \mathrm{MHz} \pm 30 \mathrm{kHz}$ | $10.700 \mathrm{MHz} \pm 25 \mathrm{kHz}$ | Red |
| C | $10.73 \mathrm{MHz} \pm 30 \mathrm{kHz}$ | $10.725 \mathrm{MHz} \pm 25 \mathrm{kHz}$ | Orange |
| E | $10.76 \mathrm{MHz} \pm 30 \mathrm{kHz}$ | $10.750 \mathrm{MHz} \pm 25 \mathrm{kHz}$ | White |
| $\mathbf{Z}$ | Combination $A, B, C, D, E$ |  |  |
| $\mathbf{M}$ | Combination $A, B, C$ |  |  |



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Rg + R1 = R2 = Input and Output Impedance
C = 10pF (Including stray capacitance and input capacitance of RF voltmeter.)
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## ■ Frequency Characteristics

SFELA10M7J AXE-B0




SFELA10M7HAXD-B0


SFELA10M7GAXX-B0



■ Frequency Characteristics
SFELA10M7GALM-BO


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■ Frequency Characteristics (Spurious)
SFELA10M7J AXE-B 0



SFELA10M7GA0G-B0


SFELA10M7FAOG-B0


SFELA10M7HAXD-B0


SFELA10M7GAXX-B0


■ Frequency Characteristics (Spurious)

SFELA10M7GAXA-B0



SFELA10M7GA0G-B0


SFELA10M7FA0G-B0


