



CERAMIC FILTER

*CERAFIL® is the Registered Trademark of Murata's Ceramic Filters.



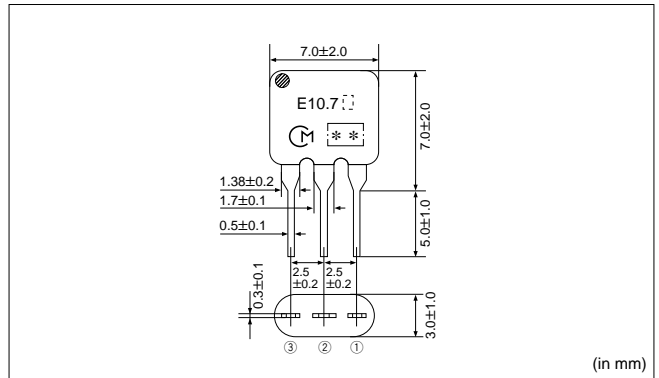
For FM Receiver **SFE10.7** Series

FEATURES

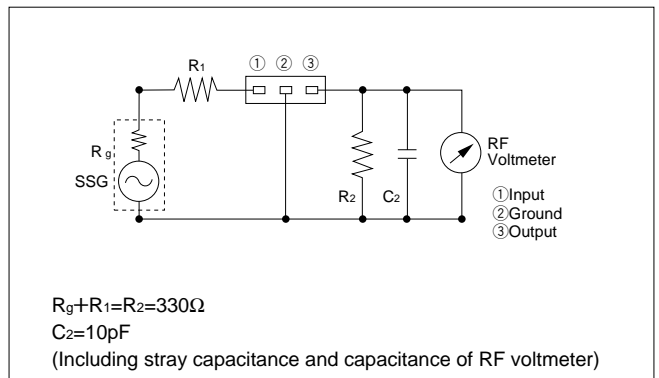
1. These miniature filters have high mechanical strength.
2. Low loss, favorable waveform symmetry, and high selectivity
3. Various band widths are available for applications in wide to narrow bands.
4. Small dispersion and stable characteristics.
5. Change in center frequency is typically within $\pm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



DIMENSIONS



MEASURING CIRCUIT



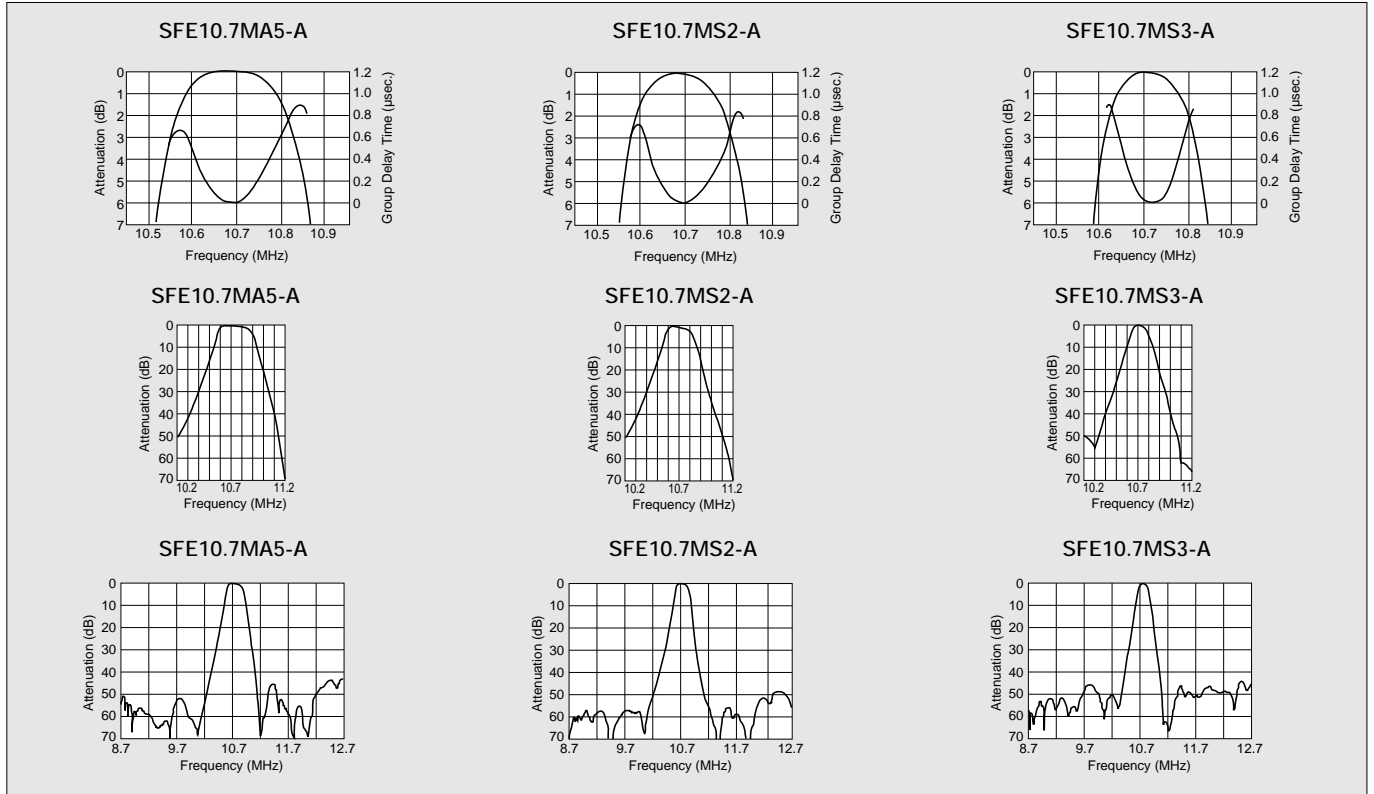
SPECIFICATIONS

Part Number	3dB Band Width (kHz)	20dB Band width (kHz) max.	Insertion Loss (dB)	Spurious Attenuation (9-12MHz) (dB) min.
SFE10.7MA5-Z	280±50	650 (520)	6 (4)	30 (43)
SFE10.7MS2-Z	230±50	600 (420)	6 (4)	40 (45)
SFE10.7MS3-Z	180±40	520 (380)	7 (4.5)	40 (45)

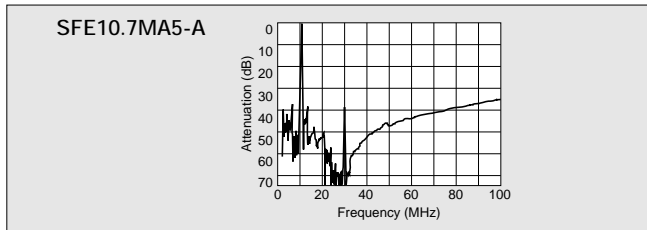
• Input/output matching impedance : 330Ω

()Typ.value

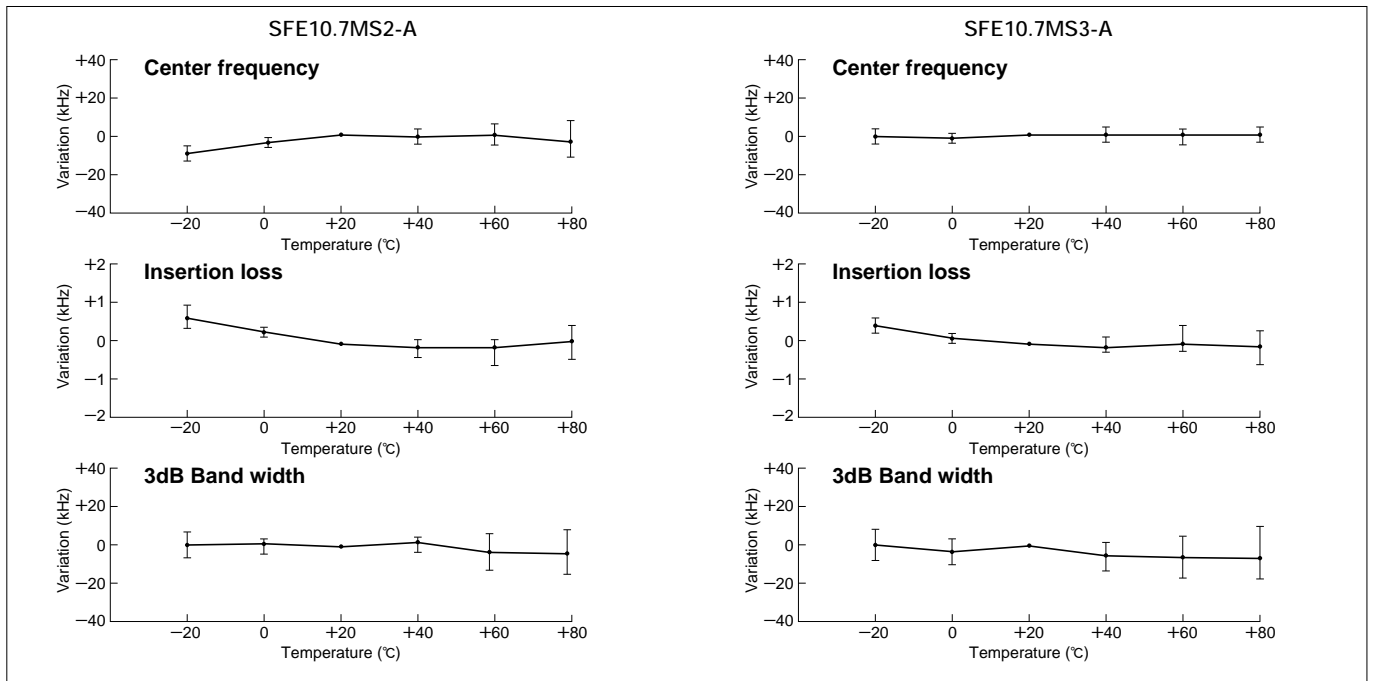
■ FREQUENCY CHARACTERISTICS



■ SPURIOUS RESPONSE



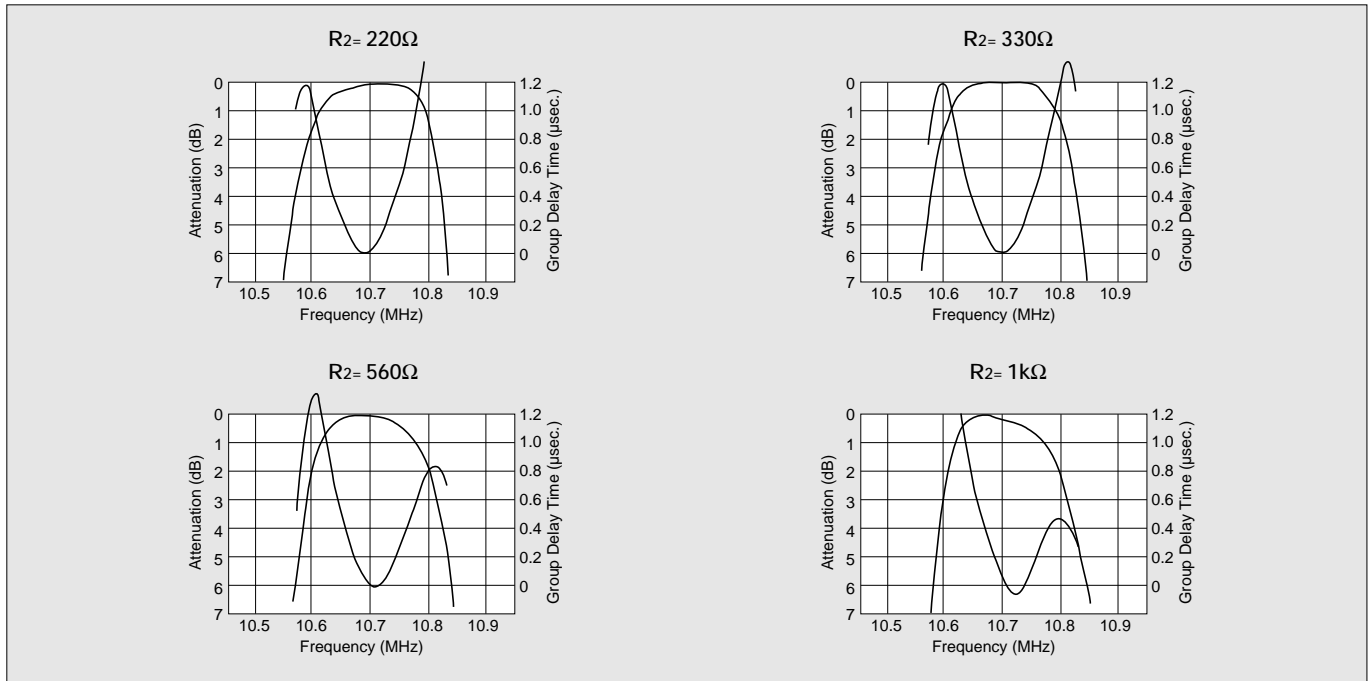
■ TEMPERATURE CHARACTERISTICS



■MATCHING CONDITIONS

- When using ceramic filters, it is most important to match the input/output load to impedance 330Ω (pure resistance). Waveform symmetry is damaged when reactance is added to the input/output load.
- Two ceramic filters directly connected can be used for high selectivity. For reducing waveform variation, it is recommended to input a buffer AMP between ceramic filters.
- The SFE 10.7 and SFT 10.7 series are of input/output symmetric structure so that in theory there is no input/output directionality. Actual circuits may use different input/output loading conditions (for example, mismatched impedance) or capacitance load. In such cases, the waveform will be a little changed by the direction of the input/output of the ceramic filters.

Load resistance and waveform of SFE10.7MS2-A ($R_g + R_l = 330\Omega$)



Loaded capacitance and waveform for SFE10.7MS2-A ($R_l + R_g = R_2 = 330\Omega$)

