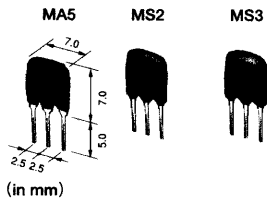


FILTERS FOR AUDIO VISUAL EQUIPMENT

CERAMIC FILTERS (CERAFIL®) FOR FM

CERAFIL® FOR FM

■ For FM-IF, 10.7MHz

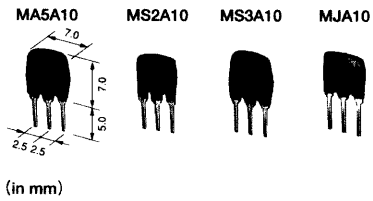


Part Number	3dB Bandwidth (kHz)	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFE10.7MA5	280±50	650(520)	6(4)	30(43)
SFE10.7MS2	230±50	600(420)	6(4)	40(45)
SFE10.7MS3	180±40	520(380)	7(4.5)	40(45)

• Input/output impedance: 330 Ω

(): Typ. values

■ Low-Loss Type A10 Series, 10.7MHz



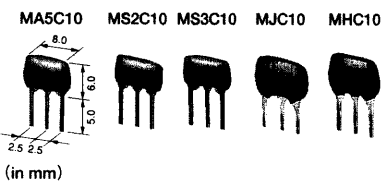
Part Number	3dB Bandwidth (kHz)	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFE10.7MA5A10	280±50	590(480)	2.5±2.0	30(42)
SFE10.7MS2A10	230±40	520(410)	3.0±2.0	35(42)
SFE10.7MS3A10	180±40	470(370)	3.5±1.5	35(42)
SFE10.7MJA10	150±40	360(300)	4.5±2.0	35(42)

• Input/output impedance: 330 Ω

• Low loss and high selectivity.

(): Typ. values

■ Low-Profile C10 Series, 10.7MHz



Part Number	3dB Bandwidth (kHz)	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFE10.7MA5C10	280±50	650(540)	3.0±2.0	30(47)
SFE10.7MS2C10	230±50	570(470)	3.0±2.0	40(49)
SFE10.7MS3C10	180±40	470(360)	3.5±2.0	35(47)
SFE10.7MJC10	150±40	360(300)	4.5±2.0	35(42)
SFE10.7MHC10	110±30	350(260)	7.0±2.0	30(38)

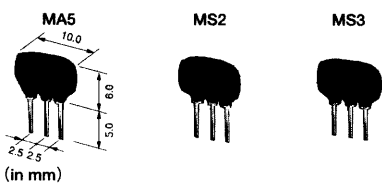
• Input/output impedance: 330 Ω

• Most suitable for a thin type and low profile set.

• The performance is the same as that of conventional types.

(): Typ. values

■ Three-element SFT Series, 10.7MHz



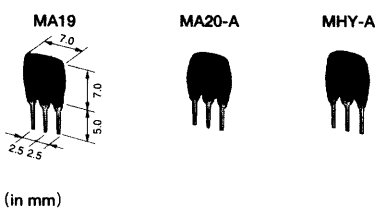
Part Number	3dB Bandwidth (kHz)	40dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFT10.7MA5	280±50	700(630)	6±2	50(60)
SFT10.7MS2	230±40	650(580)	6±2	50(60)
SFT10.7MS3	180±40	550(500)	8±2	50(60)

• Input/output impedance: 330 Ω

• High selectivity is achieved by replacing with SFE10.7 series.

(): Typ. values

■ For DBS Receiver, 10.7MHz



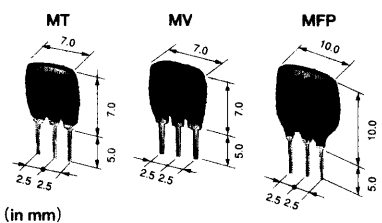
Part Number	3dB Bandwidth (kHz)	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFE10.7MA19	350 min. (450)	950(750)	3±2	20(30)
SFE10.7MA20-A	330±50	680(615)	4±2	30(40)
SFE10.7MHY-A	110±30	350(260)	7±2	30(38)

• Input/output impedance: 330 Ω (MA20-A, MHY-A), 470 Ω (MA19)

• Center frequency 10.52MHz type of SFE10.7MHY-A is also available.

(): Typ. values

■ Narrow-Band Type, 10.7MHz



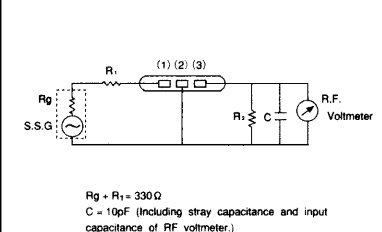
Part Number	3dB Bandwidth (kHz) min.	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz)(dB) min.
SFE10.7MT	±25(80)	200(160)	6.5±2.5	30(55)
SFE10.7MV	±13(53)	135(109)	6.0±2.0	30(50)
SFE10.7MFP	20(38)	95(78)	6.0max.(3.4)	24(28)

• Input/output impedance: 330 Ω (MT, MV), 800 Ω (MFP)

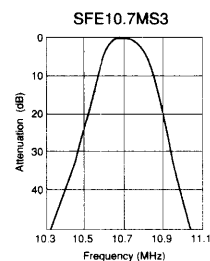
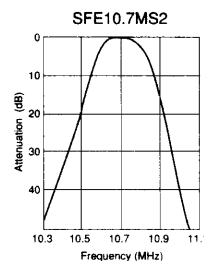
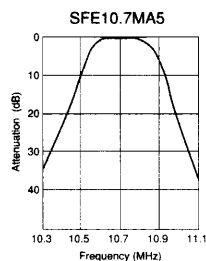
• Spurious range of SFE10.7MFP: 10.7±1MHz.

(): Typ. values

■ SFE10.7/SFT10.7 Series Test Circuit



■ Frequency Characteristics



■ Minimum Quantity (order in sets only) : 500 pcs.

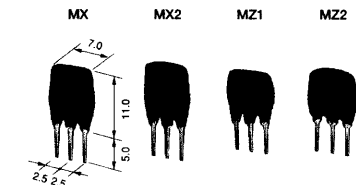
FILTERS FOR AUDIO VISUAL EQUIPMENT

CERAMIC FILTERS (CERAFIL®) FOR FM

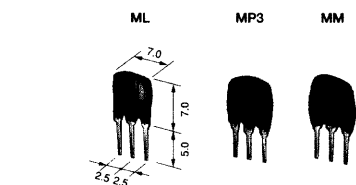
CERAFIL® FOR FM

FM-IF Tuners, 10.7MHz

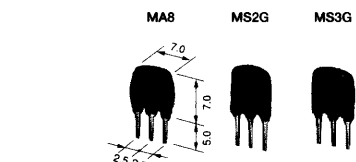
• MX Series



• ML Series

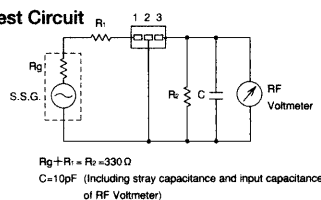


• MA/MS Series



(in mm)

Test Circuit

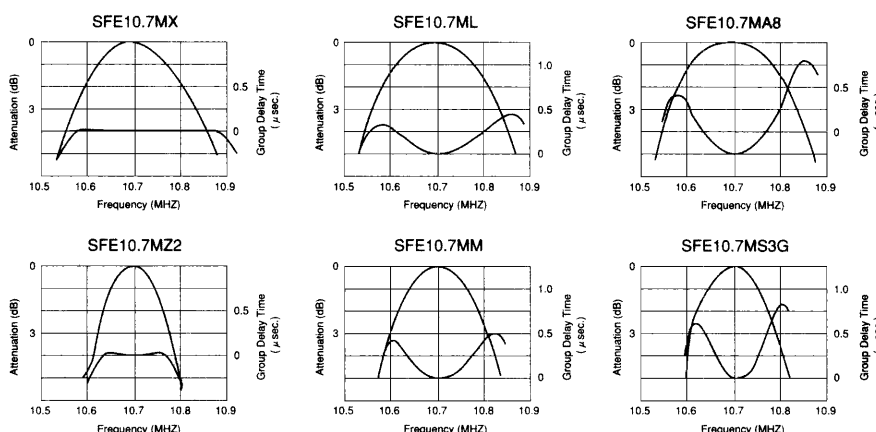


Part Number	3dB Bandwidth (kHz)	20dB Bandwidth (kHz) max.	Insertion Loss (dB) max.	Spurious (9-12MHz) (dB) min.	G.D.T Bandwidth (kHz) min.
SFE10.7MX	250 \pm 40	670(620)	12(10)	25(33)	0.2 μ sec. fo \pm 110kHz
SFE10.7MX2	220 \pm 40	610(560)	12.5(10.5)	30(37)	0.15 μ sec. fo \pm 80kHz
SFE10.7MZ1	180 \pm 30	530(460)	14(12.3)	33(38)	0.15 μ sec. fo \pm 60kHz
SFE10.7MZ2	150 \pm 30	500(420)	14(12.6)	35(41)	0.15 μ sec. fo \pm 50kHz
SFE10.7ML	280 \pm 50	700(610)	9(7)	25(33)	0.25 μ sec. fo \pm 70(\pm 105)
SFE10.7MP3	250 \pm 40	650(550)	10(8)	30(35)	0.25 μ sec. fo \pm 65(\pm 90)
SFE10.7MM	230 \pm 50	600(510)	11(9)	30(38)	0.25 μ sec. fo \pm 60(\pm 85)
SFE10.7MA8	280 \pm 50	650(520)	6(4)	30(43)	0.5 μ sec. fo \pm 80(\pm 100)
SFE10.7MS2G	230 \pm 50	600(420)	7(4.5)	40(45)	0.5 μ sec. fo \pm 60(\pm 75)
SFE10.7MS3G	180 \pm 40	520(380)	7(5)	40(45)	0.5 μ sec. fo \pm 45(\pm 60)

- Input/Output impedance: 330 Ω
- The rank of center frequency is available in two series: 30kHz steps and 25kHz steps.
- The GDT waveforms of all these types are controlled.

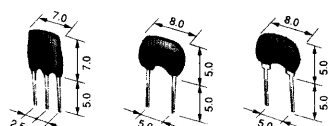
Minimum Quantity (order in sets only) : 500 pcs.

Frequency Characteristics



FM Detectors, 10.7MHz

CDA10.7MA□ CDA10.7MC□ CDA10.7MG□



(in mm)

Part Number	Detection System	Applicable IC
CDA10.7MA□	Quadrature	HA1137W, LA1265
CDA10.7MC□	Quadrature	CXA1019M, MC3356P, LA7770, BA1440
CDA10.7MG□	Quadrature(Broad band) Differential Peak	CX-20029, CX-20111, TA8122AN, LA1816 TA7303P

- Extension □ depends on applied IC.
- Each IC needs individual ceramic discriminator. Please contact us for specifications, circuit constants and the part number for each IC.

Examples of specifications

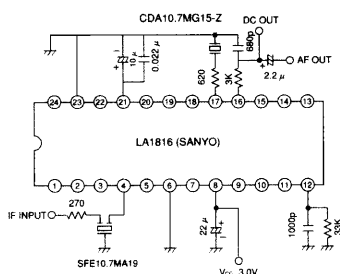
Part Number	Demodulation Output (mV) min	Demodulation Factor (%) max.	Demodulation 3dB Bandwidth (kHz) min.	Detection System	Applicable IC
CDA10.7MC1	35	1.0	242	Quadrature	CXA1019M, CX-20091
CDA10.7MG1	25	1.0	345	Quadrature	CX-20029, CX-20111
CDA10.7MG15	45	0.7	400	Quadrature	LA1816
CDA10.7MG16	60	0.9	300	Quadrature	TA8122AN

• 30% Dev.

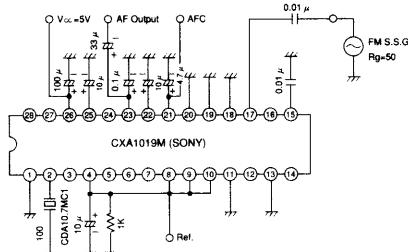
Minimum Quantity (order in sets only) : 500 pcs.

Examples of Applications

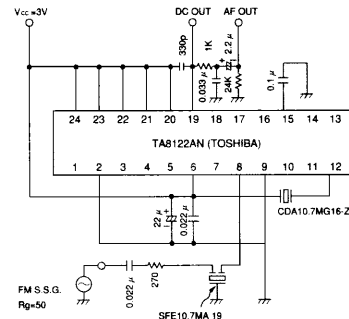
CDA10.7MG15



CDA10.7MC1



CDA10.7MG16

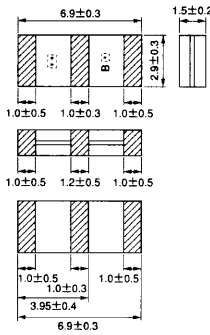
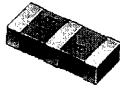


FILTERS FOR
AUDIO VISUAL EQUIPMENT

CERAMIC FILTERS (CERAFIL®) FOR FM

CERAFIL® FOR FM

Chip Type SFECA10.7 Series



*: EIAJ Data Code
**: Center Frequency Rank Code

(in mm)

Table with 5 columns: Char., 3dB Pass Bandwidth (kHz), 20dB Attenuation Bandwidth (kHz) max., Insertion Loss (dB) max., and Spurious Attenuation (9-12MHz) (dB) min. Rows include SFECA10.7MA5 and SFECA10.7MS2.

- Features
1. Super-thin (1.5mm)
2. Reflow Soldering is available.

- Applications
Small, thin radios
Head phone stereos

Minimum Quantity (order in sets only) : 2,000 pcs./reel

NOTES

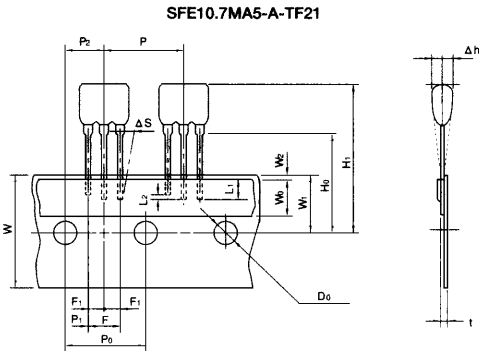
for FM

- 1. Two kinds of center frequency grouping are available: 30kHz steps and 25kHz steps. The series of 25kHz steps is most suitable for synthesized tuners.
2. ±20kHz tolerance of the center frequency is also available. This type is identified by the H at the end of the part number.
3. The temperature coefficient of center frequency is ±50ppm/°C or less in the range between -20°C and +80°C.
4. The best waveform can be obtained at the specified input/output impedance. Please note that input/output load capacitance influences the waveform change.

Table with 3 columns: 30kHz steps, Color, and 25kHz steps. Rows D through E show frequency ranges and corresponding colors.

Taping Dimensions

SFE10.7M□□- *-TF21
(*: Center Frequency Rank)

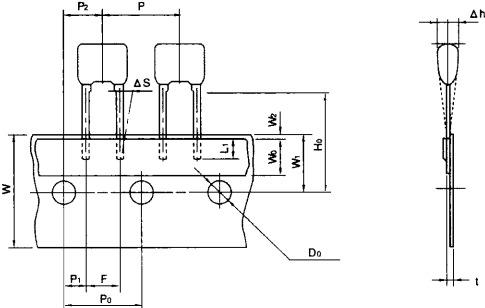


- When packaged, components of different center frequencies are not mixed.
Compatible with various automatic insertion.
Flat pack is the standard package type.

Minimum Quantity (order in sets only) : 1,500 pcs./flat pack

CDA10.7MC/MG□□- *-TF21
(*: Center Frequency Rank
□: Design Number (Corresponds to a specified IC))

CDA10.7MC□□-A-TF21



- Compatible with various automatic insertion.
Flat pack is the standard package type.

Minimum Quantity (order in sets only) : 1,500 pcs./flat pack

Table with 4 columns: Item, Code, Dimensions(mm), and Note. Rows include Portion to Cut in Case of Defect, Pitch of Component, Pich of Sprocket Hole, Length from Hole Center to Lead, Lead Spacing, Deviation across Tape, Deviation along Tape, Carrier Tape Width, Hold-down Tape Width, Position of Sprocket Hole, Hold-down Tape Width, Lead Distance between Reference and Bottom Planes, Diameter of Sprocket Hole, and Total Tape Thickness.

Table with 4 columns: Item, Code, Dimensions(mm), and Note. Rows include Portion to Cut in Case of Defect, Pitch of Component, Pich of Sprocket Hole, Length from Hole Center to Lead, Length from Hole Center to Component Center, Lead Spacing, Deviation across Tape, Deviation along Tape, Carrier Tape Width, Hold-down Tape Width, Position of Sprocket Hole, Hold-down Tape Width, Lead Distance between Reference and Bottom Planes, Diameter of Sprocket Hole, and Total Tape Thickness.

EMI SUPPRESSION FILTERS (EMIFIL®)

MICROWAVE COMPONENTS

VIDEO EQUIPMENT

FUNCTIONAL MODULES HYBRID ICs

POWER SUPPLIES

SENSORS

CAPACITORS

THERMISTORS /RESISTORS

COILS/DELAY LINES /FERRITE CORES

RESONATORS

PIEZO PRODUCTS