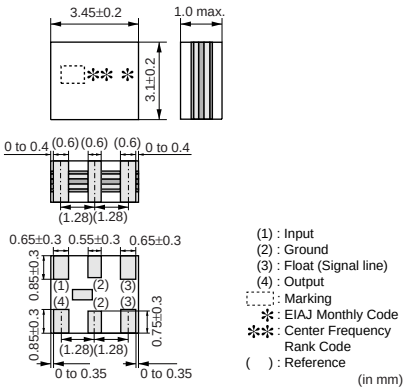
CERAFIL® 10.7MHz Ultra Thin Chip Type SFECD Series

SFECD10M7 series for FM-receivers are small, high performance and ultra thin (1.0mm max.) filters.
Piezoelectric element is connected in the sandwich shape by very thin ceramics substrate.
They have 1.0mm max. thickness and small mounting area. (3.45x3.1mm)
SFECD series enable customers to make RF modules so thin and small sized.



■ Features

1. The filters are mountable by automatic placers.
2. They are slim, at only 1.0mm max. thickness, and have a small mounting area (3.45x3.1mm) enabling flexible PCB design.
3. Operating temperature range :
   -20 to +80 (degree C)
   Storage temperature range :
   -40 to +85 (degree C)

■ Applications

1. Card type radios
2. Card type RKE modules
3. Card type PHS modules

Part Number	Center Frequency (fo) (MHz)	3dB Bandwidth (kHz)	Attenuation (kHz)	Insertion Loss (dB)	Spurious Attenuation (dB)	Input/Output Impedance (ohm)
SFECD10M7FA00-R0	10.700 ±30kHz	280 ±50kHz	590 max.	3.0 ±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
D	10.64MHz±30kHz	10.650MHz±25kHz
B	10.67MHz±30kHz	10.675MHz±25kHz
A	10.70MHz±30kHz	10.700MHz±25kHz
C	10.73MHz±30kHz	10.725MHz±25kHz
E	10.76MHz±30kHz	10.750MHz±25kHz
Z	Combination A,B,C,D,E	
M	Combination A,B,C	

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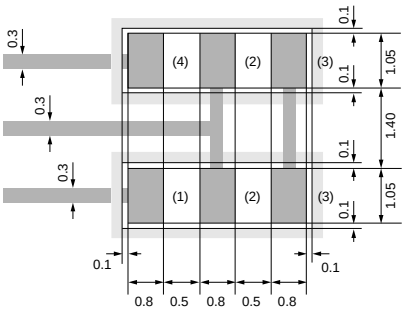
■ Standard Land Pattern Dimensions

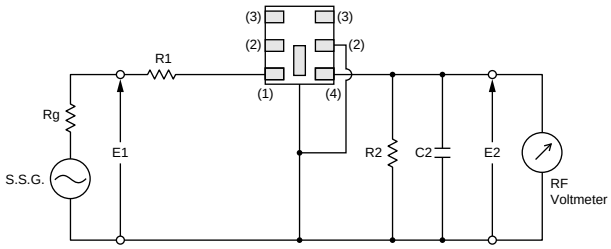


(1) : Input (2) : Ground (3) : Float (Signal Line) (4) : Output

It shows solder resist land pattern.

(in mm)

■ Test Circuit

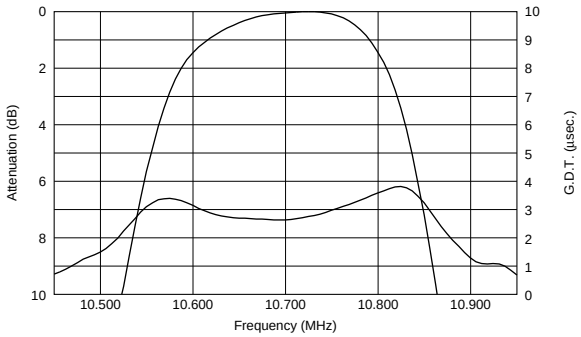


(1) : Input
(2) : Ground
(3) : Float
(4) : Output

R1+Rg=R2=330Ω±5%, Rg=50Ω
C2=10pF (Including stray capacitance and Input capacitance of RF Voltmeter)
E1 : S.S.G. Output Voltage

■ Frequency Characteristics

SFECD10M7FA00-R0



■ Frequency Characteristics (Spurious)

SFECD10M7FA00-R0