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



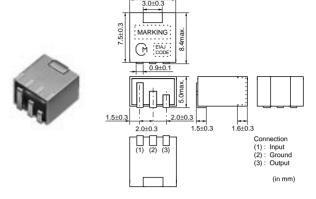
CERAFIL® 455kHz Chip Type SFPCA Series

SFPCA series for AM use is one of the most recommendable intermediate filters, having such distinctive features as high selectivity, high stability and adjustment-free operation.

Additionally its easy matching with IC helps create an easy circuit design.

■ Features

- The filters are mountable by automatic placers and can be reflow soldered and withstand washing.
- 2. The filters are wide bandwidth and high selectivity. So they are suitable for car radio and multi band radio.



Part Number	Center Frequency (fo) (kHz)	6dB Bandwidth (kHz)	Selectivity (+) (dB)	Selectivity (-) (dB)	Insertion Loss (dB)	Input/Output Impedance (ohm)	Element
SFPCA450KH1A-R1	450 ±1.0kHz	fn±3.0 min.	40 min.[fn+9kHz]	40 min.[fn-9kHz]	6.0 max.	2000	4
SFPCA450KG1A-R1	450 ±1.0kHz	fn±4.5 min.	40 min.[fn+10kHz]	40 min.[fn-10kHz]	6.0 max.	1500	4
SFPCA450KF4A-R1	450 ±1.5kHz	fn±6.0 min.	40 min.[fn+12.5kHz]	40 min.[fn-12.5kHz]	6.0 max.	1500	4

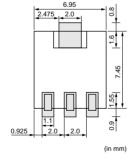
Insertion Loss: at minimum loss point

Center frequency (fo) is defined by the center of 6dB bandwidth.

(fn) means nominal center frequency (450kHz).

For safety purposes, connect the output of filters to the IF amplifier through a D.C. blocking capacitor. Avoid applying a direct current to the output of ceramic filters. The order quantity should be an integral multiple of the "Minimum Quantity" shown in the package page.

■ Standard Land Pattern Dimensions



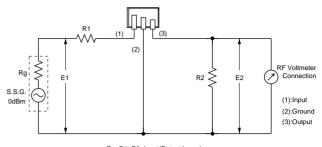


■ Recommended IFT

Type	SFPCA				
Winding Specification	(1)—(2)	(2)—(3)	(4)—(6)		
S(3) (4)S (2) (6) (Bottom view)	60T	125T	28T		
No load Qu	40				
Tuning Capacitance	180pF				

Matching of CERAFIL®SFPCA series with IFT is decided by the Qu of IFT and IFT secondary side impedance, [Z2]. Set the Qu at about 40 because a Qu value which is too high (e.g.,90) may produce ripple in the waveform. It is recommended to match the impedance of [Z2] with that of the CERAFIL®.

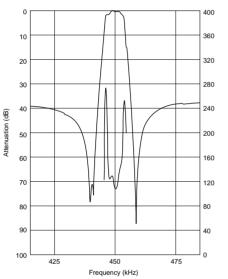
■ Test Circuit



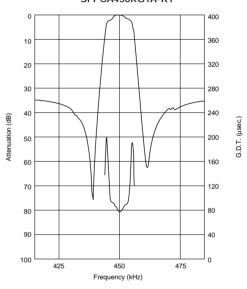
Rg+R1=R2=Input/Output Impedance

■ Frequency Characteristics

SFPCA450KH1A-R1



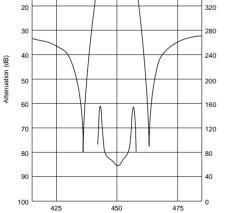
SFPCA450KG1A-R1



10 20

SFPCA450KF4A-R1

360



Frequency (kHz)