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



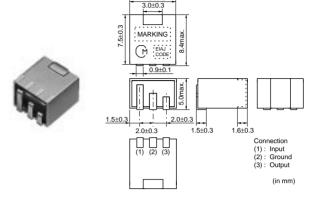
CERAFIL® 455kHz Chip Type SFPCA Series

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

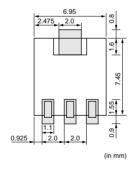
Insertion Loss: at minimum loss point

Center frequency (fo) is defined by the center of 6dB bandwidth. $\label{eq:center}$

(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



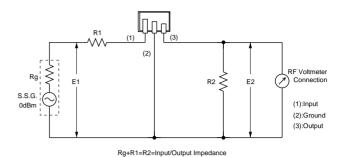


■ Recommended IFT

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				

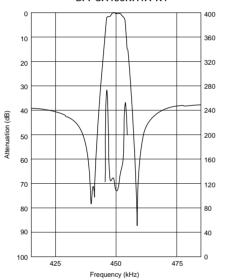
Matching of CERAFIL®SFPCA series with IFT is decided by the Qu of IFT and IFT secondary side impedance, [Z2]. Set the Qu at about 40 because a Qu value which is too high (e.g.,90) may produce ripple in the waveform. It is recommended to match the impedance of [Z2] with that of the CERAFIL®.

■ Test Circuit

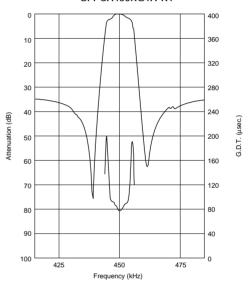


■ Frequency Characteristics

SFPCA450KH1A-R1



SFPCA450KG1A-R1



SFPCA450KF4A-R1 Frequency (kHz)

