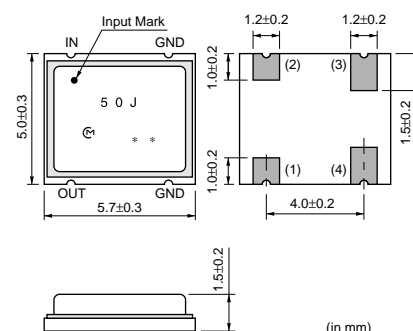


# CERAFIL® (Filters/Traps/Discriminators) for Audio/Visual Equipment



## CERAFIL® 455kHz Chip Type PFWCC Series

PFWCC 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. This is the most recommendable for portable radio with small package. Especially, reflowable with SMD package.



### ■ Features

1. Center frequency range between 450 and 470 kHz are available standard tolerance of  $\pm 2$  kHz.
2. For frequency synthesizers, center frequencies of 450, 459 and 468 kHz are available standard tolerance of  $\pm 1$  kHz.

Part Number	Center Frequency (fo) (kHz)	3dB Bandwidth (kHz)	Selectivity (+) (dB)	Selectivity (-) (dB)	Insertion Loss (dB)	Input/Output Impedance (ohm)	Element
<b>PFWCC450KS2A-R0</b>	450 $\pm 2.0$ kHz	5.5 $\pm 1.5$ kHz	17 min. [fo+9kHz]	17 min. [fo-9kHz]	6.0 max.	3000	2

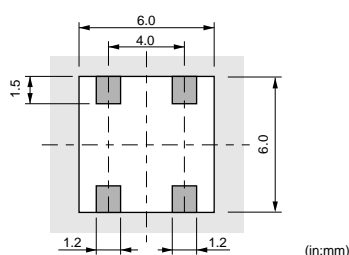
Insertion Loss: at minimum loss point

Center frequency (fo) is defined by the center of 3dB bandwidth.

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



The solder resist should be printed except for the land pattern on the P.C.B..

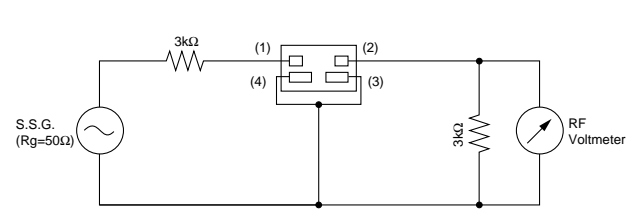
The material of P.C.B. is the epoxy resin of glass fabric base (t=0.8mm)

Recommended IFT

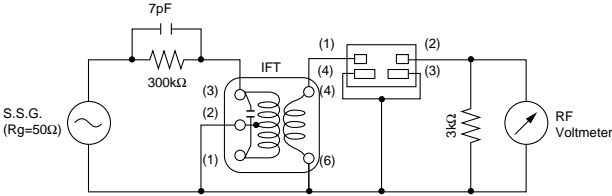
Item \ Type	7×7mm IFT			5×5mm IFT		
	(1)―(2)	(2)―(3)	(4)―(6)	(1)―(2)	(2)―(3)	(4)―(6)
Winding Specification	(1)―(2)	(2)―(3)	(4)―(6)	(1)―(2)	(2)―(3)	(4)―(6)
S(3) (2) (1)  (Bottom view)	85T	67T	23T	84T	98T	33T
No load Qu	90			65		
Tuning Capacitance	180pF			180pF		

• Maching of CERAFIL®PFWLA series with IFT is decided by the IFT secondary side impedance, |Z2|. Set the |Z2| at about 4.2kΩ.

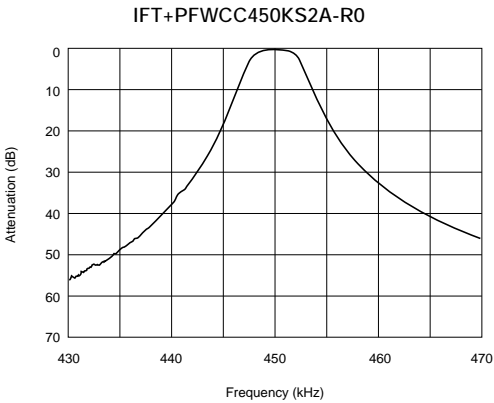
Test Circuit (CERAFIL® Only)



Test Circuit (CERAFIL® with IFT)



Frequency Characteristics



Frequency Characteristics (Spurious)

