west coast magnetics WCM700-13-4

multi-channel RF filters

PRODUCT DESCRIPTION

WCM's patent-pending technology provides a great improvement in RF filtering technology, by improving impedance characteristics, space efficiency, power handling and temperature stability compared to LC parallel filters. Advancements include:

- Novel technique for making highly compact, narrow band, high impedance filters tunable for frequencies from 1 MHz to 50 MHz
- · Supports high power applications
- · Coils placed in series to permit independent filtering at multiple frequencies
- Technology enables multiple parallel independent filter channels into a single filter coil.

ENGINEERING DATA

Single-component design

WCM's technology, rather that combating parasitic effects, takes advantage of them. The parasitic compacitance becomes the resonating capacitance for the turns of copper comprising the inductor. The designer is no longer concerned with sourcing the correct capacitor and inductor (specifying individual components). The designer can instead use a single WCM multi-channel filter and be assured the parallel LC circuit will have high impedance, without any subcomponent tuning.









multi-channel RF filters



100

80

60

40

20

-20

-40

-60

-80

1.0

6.0

Phase (°)





www.wcmagnetics.com 1.800.628.1123

16.0

13.6.26

-Channel 1

Channel 2

Channel 3

- Channel 4

21.0

Phase vs. Frequency

11.0

Frequency (MHz)

Bulletin WCM700-13-4 Rev B