



**Wainwright  
Instruments GmbH**

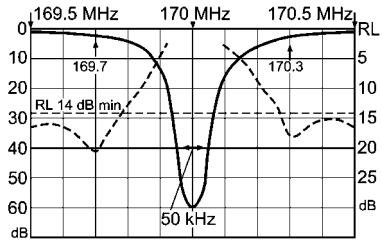
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**5 Resonator  
Cavity Design  
WRCD Series**

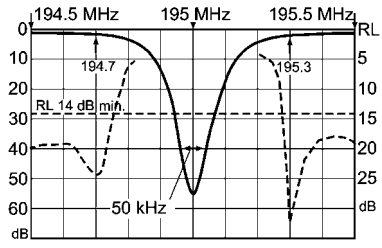
# Tunable Notch Filter

**170 to 220 MHz**

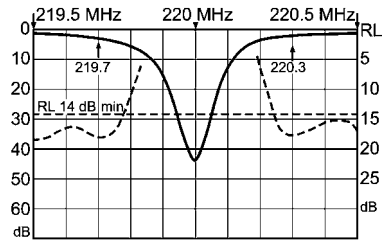
**Model No.  
WRCD 170/220-0.05/40-5...**  
(add codes - see below)



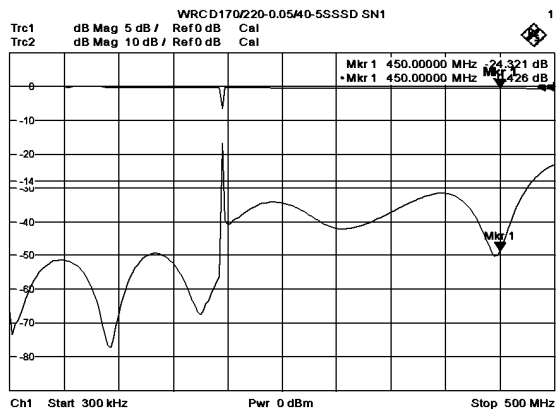
Tuned to the low end



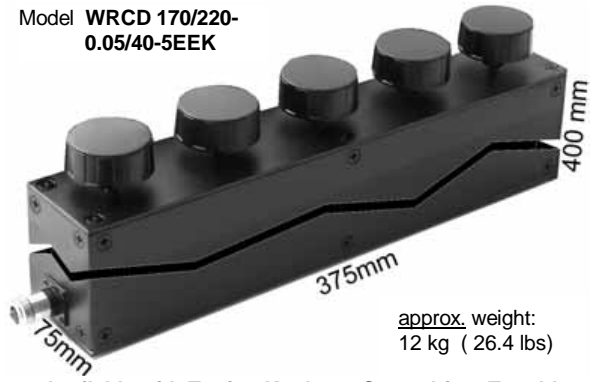
Tuned to 195 MHz



Tuned to the high end



Model **WRCD 170/220-0.05/40-5EEK**



approx. weight:  
12 kg ( 26.4 lbs)

Available with Tuning Knobs or Screwdriver Tunable

This filter will produce up to 5 notches in the passband. The notch Fo is determined by the user by tuning each resonator. Each notch is very narrow and has 5 to 10 dB reject attenuation. Several notches can be combined by tuning them to the same frequency. This increases the notch depth and width. Attenuation will be greater at the low end of the tuning range and less at the upper end. The filter is designed to produce a 50 kHz bandwidth with at least 40 dB reject attenuation when all notches are tuned to 195 MHz. The temperature specification of +15° to +40°C applies to this frequency and stability decreases away from the center towards both ends of the range. Each filter is tested over the full range and 4 curves (as shown above) are supplied on delivery.

Specifications	Model No. WRCD 170/220-0.05/40-5EEK		Add connector code (SS or EE) and option code (K or SD)
<b>Tuning Range:</b>	170 to 220 MHz		
<b>Passband Loss:</b>	1.0 dB max. DC to 450 MHz <u>except</u> 3 dB max. at Fo ± 300 kHz (notch corners)		
<b>Return Loss(50 Ω):</b>	14 dB min. = VSWR 1.5 : 1 max.		
<b>Notch Attenuation</b>	40 dB at 195 MHz ± 25 kHz		
<b>Oper. Temperature:</b>	+15°C to +40°C		
<b>Connector Codes:</b>	SMA-female = <b>SS</b> or N-female = <b>EE</b> - on <u>each</u> 400 x 75 mm surface		
<b>Options Codes:</b>	Filters with tuning knobs = <b>K</b> - filters with slots for screwdriver tuning = <b>SD</b>		
<b>Mounting Provision:</b>	4 x M4 threaded holes each on all sides - see drawing UMP-1 (Website)		
<b>Dimensions:</b>	400 mm high (plus tuning knobs) x 75 x 375 mm (plus connectors)		
Price Basis: see Ord.Inf., Terms, Warranty	<b>PRICES:</b>	<b>Euro:</b> Price based on shipment ex factory	<b>US-\$:</b> Price includes shipping, import charges and customs duty. *
When purchasing	1 - 4 pcs.	<b>€1.573,--</b>	<b>\$ 2,440.--</b>
Test Sheet with Analyzer Curves supplied.			
* Prices in US-\$ for shipments to the USA only. American customers are welcome to purchase at EURO-prices and carry postage/freight and import charges directly.			

**Delivery Time:** normally 4 to 6 weeks - depending on work load in the factory at time of order.