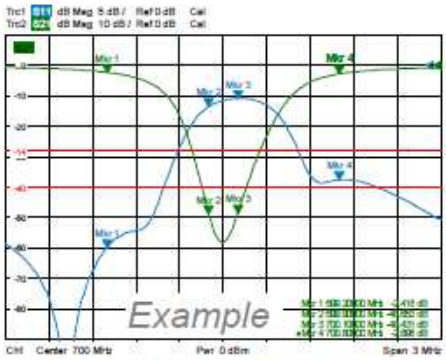
5 Resonator Cavity Design WRCT Series

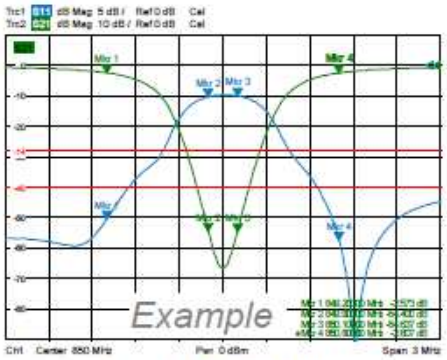
Wide Range Tunable Notch Filter

For Laboratory Applications Tuning Range 700 to 1000 MHz

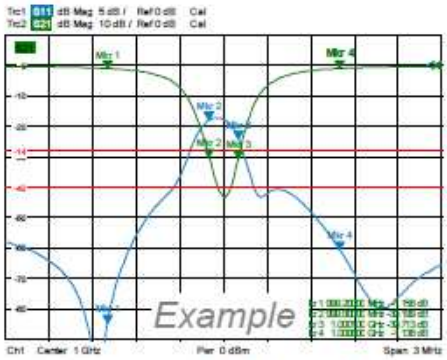
Model No. WRCT700/1000-0.2/40-5...
(add codes - see below)



Tuned to the low end

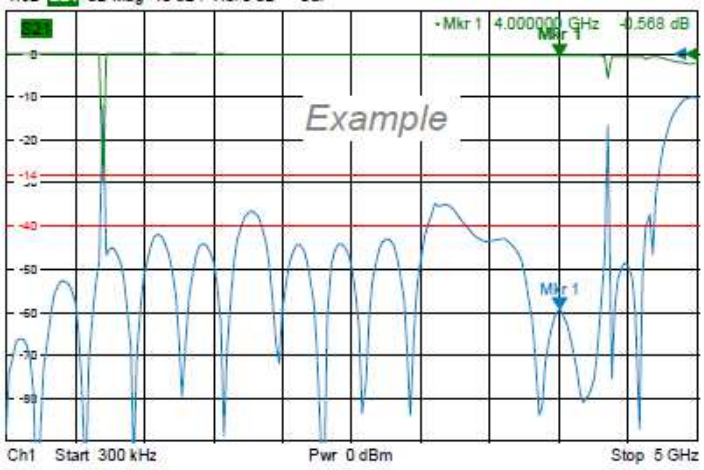


Tuned to 850 MHz



Tuned to the high end

DC Fo 700MHz approx.3rd Harmonic 5000 MHz



Model **WRCT700/1000- 0.2/40-5SSK**

approx. Weight: 3.5 kg (7.7 lbs.)

Similar to our narrow range Tunable Notch Filter, this **WIDE TUNING RANGE** model will also 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 remain essentially the same over the tuning range.** The filter will be temperature stable **if operated in a laboratory environment (approx. 20-25°C).** We will normally temperature stabilize the filter at 850 MHz, but if the customer specifies another frequency, where he wants the filter to be temperature stabilized, this should be specified with the order. Each filter is tested over the full range and 4 curves are included in the delivery.

Specifications	**Model No. WRCT 700/1000-0.2/40-5**	Add connector code (**SS** or **EE**) and option code (**K** or **SD**)
Tuning Range:	700 to 1000 MHz	
Passband Loss:	1 dB max. DC to 4000 MHz except 3rd harmonic notch 3 dB max. at Fo ± 0.8 MHz (notch corners)	
Return Loss (50 Ω):	14 dB min. = VSWR 1.5 : 1 max.	
Notch attenuation:	40 dB min. at Notch Fo ± 100 kHz	
Oper. Temperature:	Laboratory Environment	
Connector Codes:	SMA-female = **SS** or N-female = **EE** – on each 107 x 60 mm surface	
Options Codes:	Filters with tuning knobs = **K** - filters with slots for screwdriver tuning = **SD**	
Mounting Provision:	4 x M4 threaded holes each on all sides - see drawing ***UMP-1*** (Website)	
Dimensions:	107 mm high (plus tuning knobs) x 60 x 300 mm (plus connectors)	