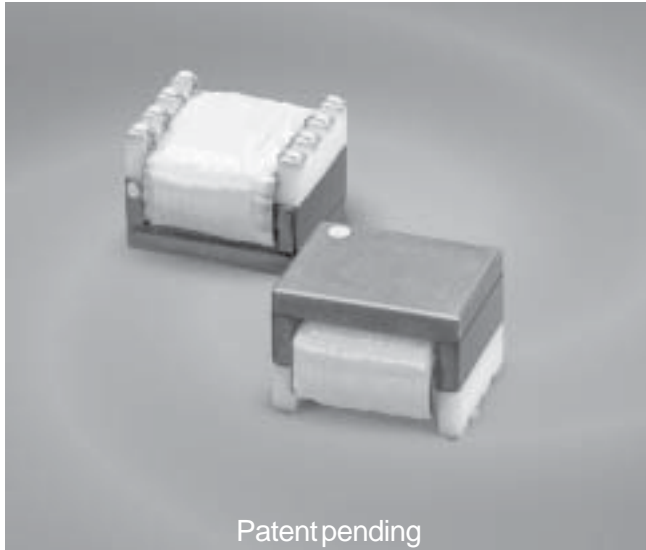


**NEW!**

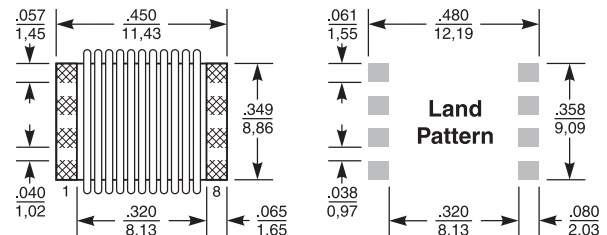
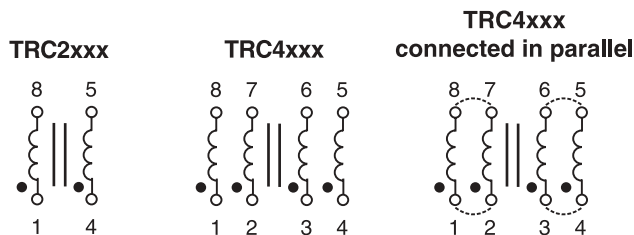
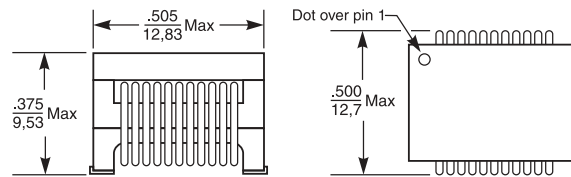
# Tip and Ring Common Mode Filters



These high performance, high current tip and ring filters are designed to help telecom equipment engineers meet FCC and CCITT requirements.

They provide up to 35 dB attenuation of common mode noise over a broad frequency range, while the low differential mode attenuation assures excellent signal integrity. The filters come in 2- and 1-line versions and provide 1500 Vrms isolation between pairs.

For free evaluation samples, contact Coilcraft or visit [www.coilcraft.com](http://www.coilcraft.com).



Parts/reel: 13" 300 Tape width: 24 mm  
For packaging data see Tape and Reel Specifications section.

## Single line filters

Part number	Lines	Inductance <sup>1</sup> min (µH)	Rated current <sup>2</sup> (A)	DCR <sup>3</sup> max (Ohms)	Dielectric strength <sup>4</sup> min (Vrms)	Common mode attenuation typ <sup>5</sup>		
						-10 dB	-20 dB	-30 dB
TRC2050	1	140	0.50	0.225	1500	0.4- >1000 MHz	1.2-400 MHz	6.5-70 MHz
TRC4050*	1	140	1.00*	0.113	1500	0.2- 400 MHz	0.6-100 MHz	2-20 MHz
TRC2120	1	70	1.20	0.150	1500	0.6- >1000 MHz	2.2-320 MHz	40-120 MHz
TRC2200	1	20	2.00	0.055	1500	0.5- >1000 MHz	2.2-320 MHz	-
TRC4120*	1	70	2.40*	0.075	1500	0.5- >1000 MHz	2-120 MHz	9-140 MHz
TRC4200*	1	20	4.00*	0.028	1500	1.8 - 350 MHz	7-110 MHz	-

\* When two windings are connected in parallel on the board. See schematic above.

## Dual line filters

Part number	Lines	Inductance <sup>1</sup> min (µH)	Rated current <sup>2</sup> (A)	DCR <sup>3</sup> max (Ohms)	Dielectric strength <sup>4</sup> min (Vrms)	Common mode attenuation typ <sup>5</sup>		
						-10 dB	-20 dB	-30 dB
TRC4050	2	140	0.50	0.225	1500	0.25-400 MHz	0.8-110 MHz	3-20 MHz
TRC4120	2	70	1.20	0.150	1500	0.4- >1000 MHz	1.4-300 MHz	10-110 MHz
TRC4200	2	20	2.00	0.055	1500	1.2-500 MHz	6-300 MHz	85-110 MHz

1. Inductance measured at 100 kHz, 0.1 Vrms, using Agilent/HP 4263B impedance analyzer.

2. Average current for 40°C temperature rise above 25°C ambient.

3. DCR measured on Keithley micro-ohmmeter.

4. Single line parts: 1-4, dual line parts: 1,2-3,4.

5. Measured using Agilent/HP 8753ES network analyzer.

6. Operating temperature range -40°C to +85°C.

7. Electrical specifications at 25°C.

# Coilcraft®

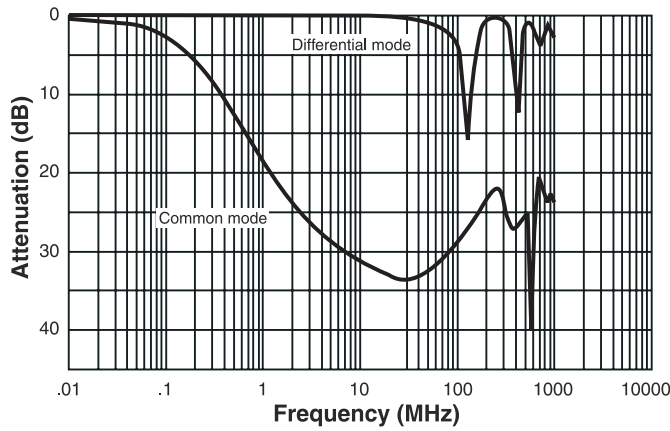
Specifications subject to change without notice. Document 257-1 Revised 12/03/02

1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

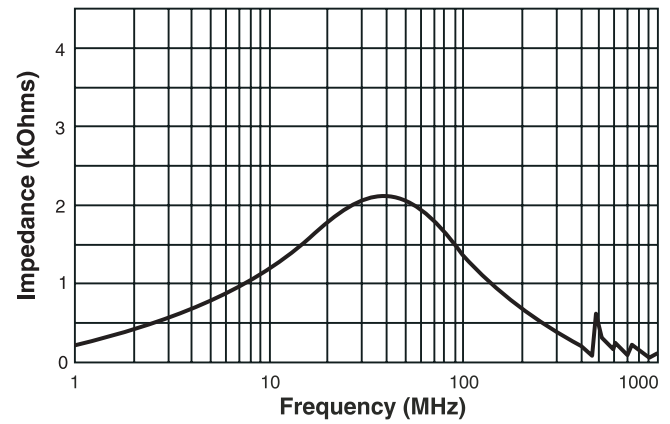
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# Tip and Ring Common Mode Filters

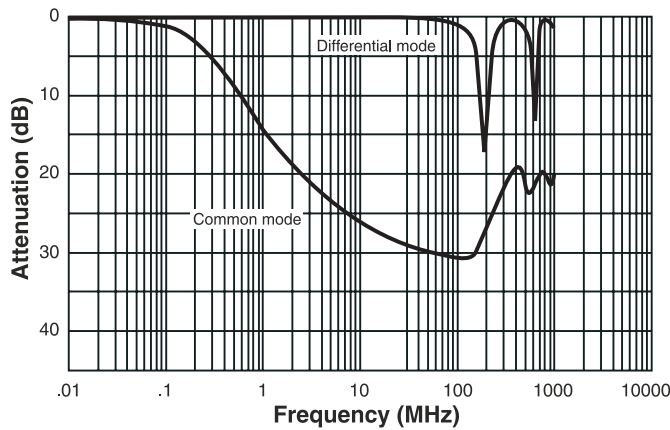
## Typical Response - TRC2050



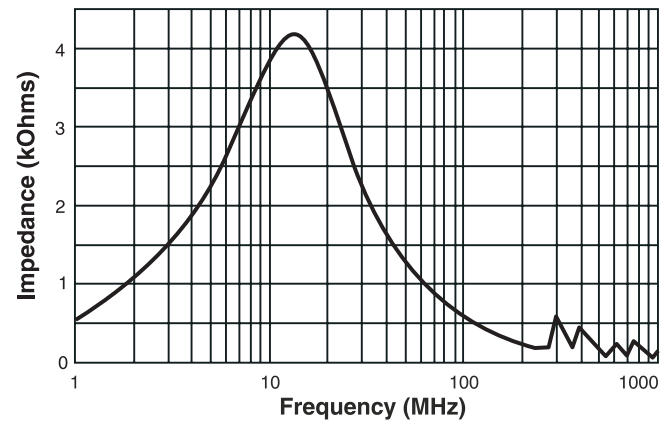
## Typical Impedance - TRC2050



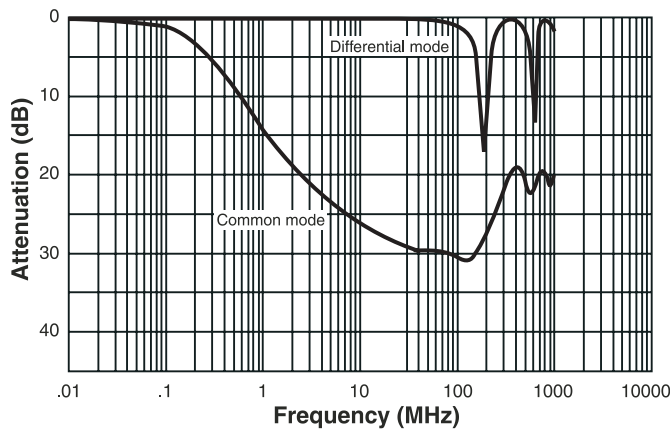
## Typical Response - TRC2120



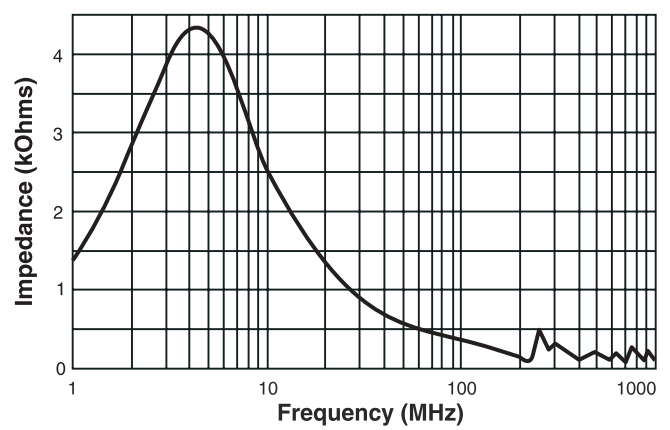
## Typical Impedance - TRC2120



## Typical Response - TRC2200



## Typical Impedance - TRC2200



\*measured on Agilent/HP 8753ES analyzer



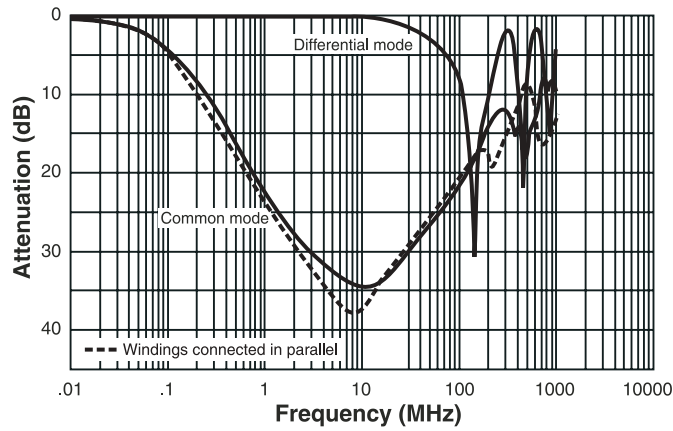
Specifications subject to change without notice. Document 257-2 Revised 11/6/01

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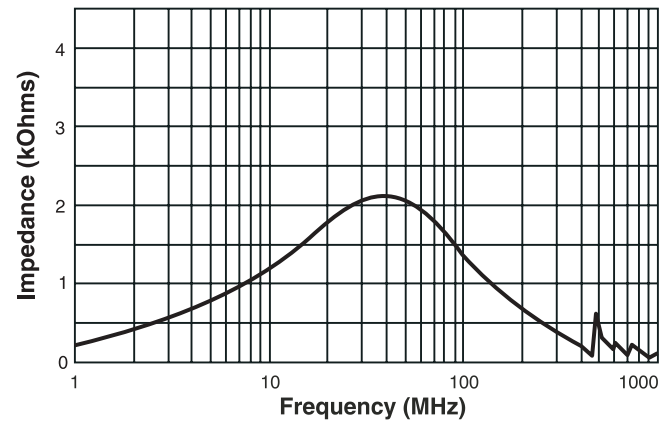
E-mail [info@coilcraft.com](mailto:info@coilcraft.com) Web <http://www.coilcraft.com>

# Tip and Ring Common Mode Filters

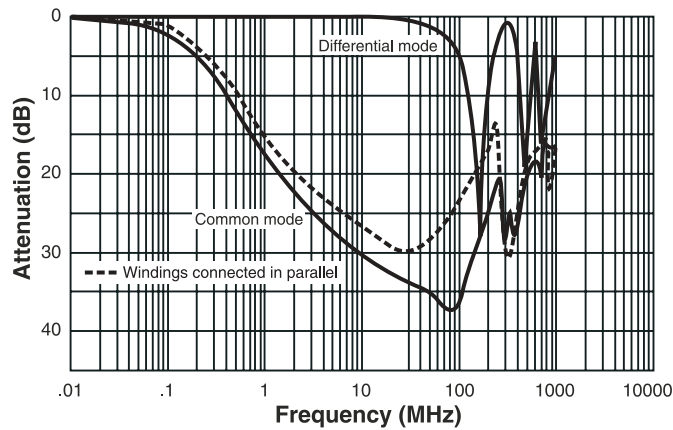
## Typical Response - TRC4050



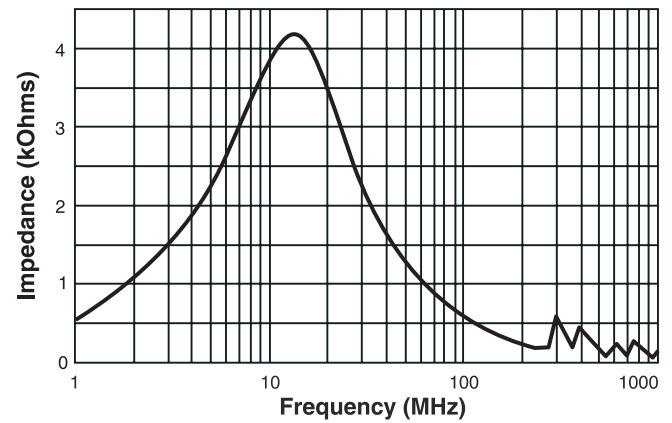
## Typical Impedance - TRC4050



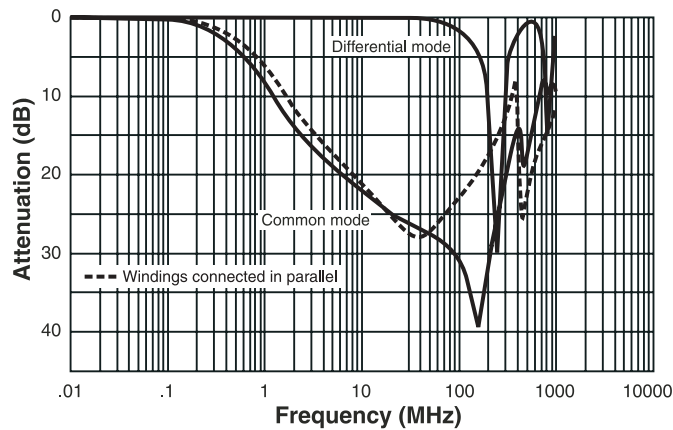
## Typical Response - TRC4120



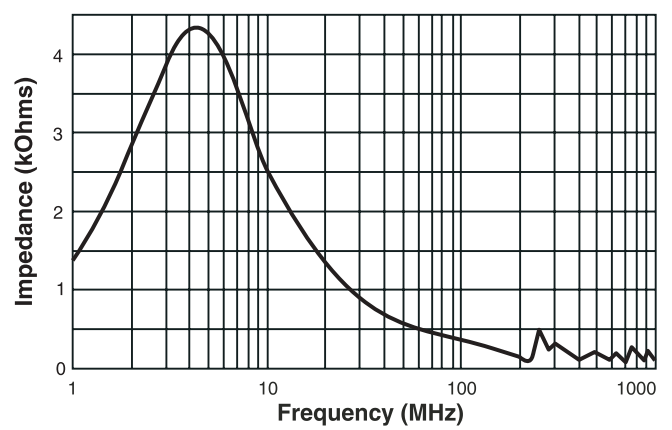
## Typical Impedance - TRC4120



## Typical Response - TRC4200



## Typical Impedance - TRC4200



\*measured on Agilent/HP 8753ES analyzer



Specifications subject to change without notice. Document 257-3 Revised 11/6/01

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