

# 502 series

## common mode chokes

### PRODUCT DESCRIPTION

West Coast Magnetics' 502 series common mode chokes are designed to attenuate common mode line noise. These common mode chokes can handle currents up to 25 amps and are available in vertical and horizontal mount packages. They provide a typical minimum 15 dB of attenuation from 50 kHz to 30 MHz. They feature interwinding isolation of 1500 Vac and 3mm clearance for safety requirements.

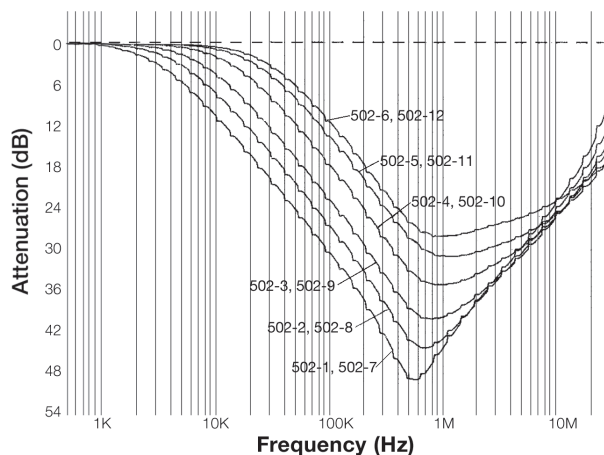
### FEATURES & BENEFITS

Peak current handling capability to 50 amps – RMS current to 25 amps – Excellent noise attenuation – Horizontal and vertical packages

Product Code	Minimum Inductance (mH)	Rated DC Current (amps) 40°C Temp Rise	Nominal Leakage Inductance (µH)	Nominal DCR (mOhms)	Interwinding Hypot (Vac)	Mount Style
502-1	6.40	4.5	90	92.0	1500	Horizontal
502-2	3.70	6.0	55	45.0	1500	Horizontal
502-3	2.30	8.5	36	22.0	1500	Horizontal
502-4	1.30	12.0	20	11.0	1500	Horizontal
502-5	0.82	17.0	14	5.7	1500	Horizontal
502-6	0.52	25.0	8	2.9	1500	Horizontal
502-7	6.40	4.5	90	92.0	1500	Vertical
502-8	3.70	6.0	55	45.0	1500	Vertical
502-9	2.30	8.5	36	22.0	1500	Vertical
502-10	1.30	12.0	20	11.0	1500	Vertical
502-11	0.82	17.0	14	5.7	1500	Vertical
502-12	0.52	25.0	8	2.9	1500	Vertical



### COMMON MODE NOISE ATTENUATION



Note: Attenuation measured on HP3577A Network Analyzer in 50 ohm cin

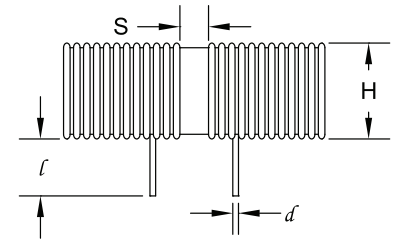


Dimensions:  $\frac{\text{inches}}{\text{mm}}$

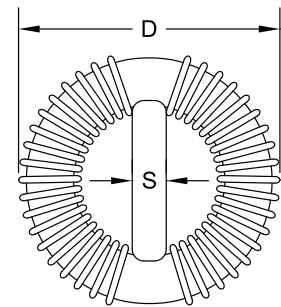
## common mode chokes

Product Code	H	L	W	D	S	$d$	$l$	X	Y
502-1	$\frac{0.52}{13.2}$	NA	NA	$\frac{1.56}{39.6}$	$\frac{0.12}{3.0}$	$\frac{0.028}{0.71}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-2	$\frac{0.52}{13.2}$	NA	NA	$\frac{1.56}{39.6}$	$\frac{0.12}{3.0}$	$\frac{0.035}{0.89}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-3	$\frac{0.56}{14.2}$	NA	NA	$\frac{1.60}{40.6}$	$\frac{0.12}{3.0}$	$\frac{0.044}{1.1}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-4	$\frac{0.60}{15.2}$	NA	NA	$\frac{1.63}{41.4}$	$\frac{0.12}{3.0}$	$\frac{0.05}{1.3}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-5	$\frac{0.63}{16.0}$	NA	NA	$\frac{1.67}{42.4}$	$\frac{0.12}{3.0}$	$\frac{0.068}{1.7}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-6	$\frac{0.67}{17.0}$	NA	NA	$\frac{1.70}{43.2}$	$\frac{0.12}{3.0}$	$\frac{0.085}{2.2}$	$\frac{0.25}{6.4}$	$\frac{1.4}{35.6}$	$\frac{0.5}{12.7}$
502-7	$\frac{1.65}{41.9}$	$\frac{1.60}{40.6}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.05}{1.3}$	$\frac{0.20}{5.1}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$
502-8	$\frac{1.68}{42.7}$	$\frac{1.63}{41.4}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.05}{1.3}$	$\frac{0.20}{5.1}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$
502-9	$\frac{1.71}{43.4}$	$\frac{1.66}{42.2}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.05}{1.3}$	$\frac{0.20}{5.1}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$
502-10	$\frac{1.74}{44.2}$	$\frac{1.69}{42.2}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.05}{1.3}$	$\frac{0.20}{5.1}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$
502-11	$\frac{1.76}{44.7}$	$\frac{1.71}{43.4}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.068}{1.7}$	$\frac{0.25}{6.4}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$
502-12	$\frac{1.77}{45.0}$	$\frac{1.73}{43.9}$	$\frac{0.85}{21.6}$	NA	$\frac{0.12}{3.0}$	$\frac{0.085}{2.2}$	$\frac{0.25}{6.4}$	$\frac{0.9}{22.9}$	$\frac{0.6}{15.2}$

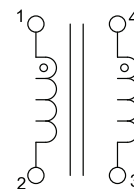
502-1, -2, -3, -4, -5, -6  
Side View



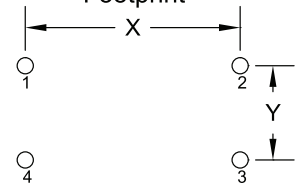
502-1, -2, -3, -4, -5, -6  
Top View



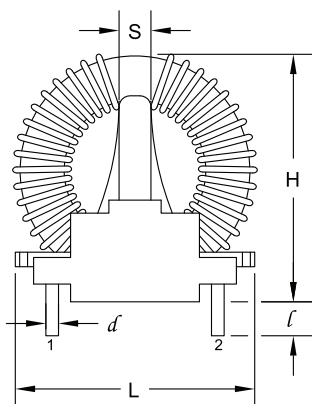
502-1, -2, -3, -4, -5, -6  
Schematic



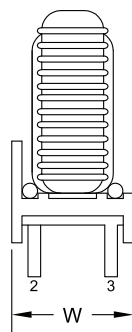
502-1, -2, -3, -4, -5, -6  
Footprint



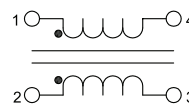
502-7, -8, -9, -10, -11, -12  
Side View



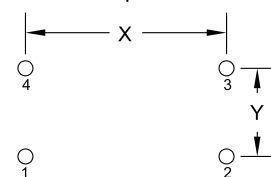
502-7, -8, -9, -10, -11, -12  
Side View



502-7, -8, -9, -10, -11, -12  
Schematic



502-7, -8, -9, -10, -11, -12  
Footprint



Note: All materials of construction minimum Class B 130° C rated.