

# WCM501 Series Common Mode Chokes

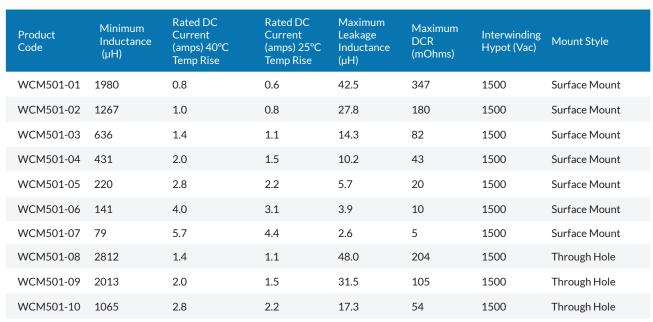
## **Product Description**

West Coast Magnetics' 501 series common mode chokes are designed to attenuate common mode line noise in switching power supplies. These chokes provide a typical minimum 15 dB of attenuation from 100 kHz to 30 MHz. They are offered in two package styles. A low profile surface mount package is compatible with pick and place equipment. A larger through-hole package offers greater attenuation and is also compatible with pick and place equipment.

### **Features and Benefits**

Low profile, surface mount option – Minimum 3mm clearance between windings – High attenuation in a small package – DC currents up to 11 amps – Application specific designs available on request

## **Engineering Data**







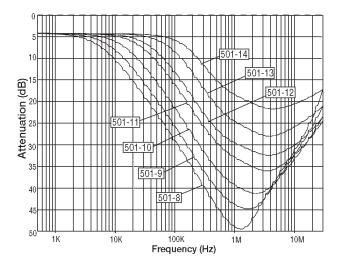


## **Engineering Data Continued**

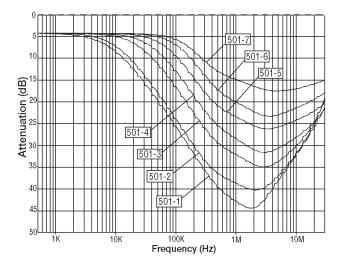
Product Code	Minimum Inductance (µH)	Rated DC Current (amps) 40°C Temp Rise	Rated DC Current (amps) 25°C Temp Rise	Maximum Leakage Inductance (µH)	Maximum DCR (mOhms)	Interwinding Hypot (Vac)	Mount Style
WCM501-11	599	4.0	3.1	12.0	25	1500	Through Hole
WCM501-12	416	5.7	4.4	7.1	13	1500	Through Hole
WCM501-13	204	8.1	6.3	4.1	6	1500	Through Hole
WCM501-14	104	11.2	8.9	2.9	2	1500	Through Hole

## **Graphs WCM501 Series**

#### Common Mode Attenuation - Surface Mount Style



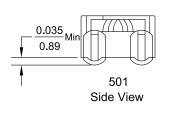
#### Common Mode Attenuation - Through Hole Style

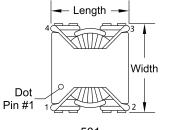


#### Note: Attenuation measured in 50 Ohm circuit on HP3577A Network Analyzer

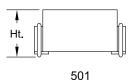


## SURFACE MOUNT OPTION

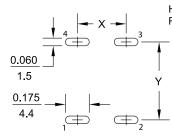




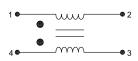
501 Top View



Side View



501 Suggested PCB Layout

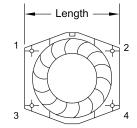


Moulding: Ryton R4 Rating: UL 94-VO SMD Pads: Sn96.5/Cu3.0/Ag0.5

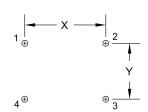
Dimensional Tolerance Length, Width =  $\pm 0.010/0.25$ Height Dimension = Maximum Recommended Tolerance X,Y =  $\pm 0.005/0.13$ 

Length	Width	Height	х	Y
<u>0.650</u>	<u>0.750</u>	<u>0.400</u>	<u>0.445</u>	<u>0.660</u>
16.5	19.1	10.2	11.3	16.8

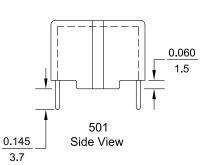
## THROUGH HOLE OPTION



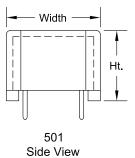
501 Bottom View

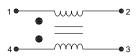


501 Suggested PCB Layout



Note:





Moulding: Ryton R4 Rating: UL 94-VO SMD Pads: Sn96.5/Cu3.0/Ag0.5

Dimensional Tolerance Length, Width =  $\pm 0.010/0.25$ Height Dimension = Maximum Pin Diameter = 0.026" x 0.026" Pin Length =  $0.145/3.7\pm0.020/0.5$ 

Length	Width	Height	х	Y
<u>0880</u>	<u>0.890</u>	<u>0.570</u>	<u>0.787</u>	<u>0.492</u>
22.4	22.6	14.5	20.0	12.5

#### Dimensions:

Inches mm Please specify vertical or horizontal mount with your order.

\*All materials of construction minimum Class B 130° C rated.

