

### EMI Consideration

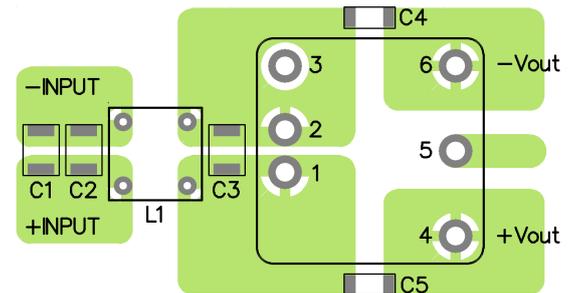
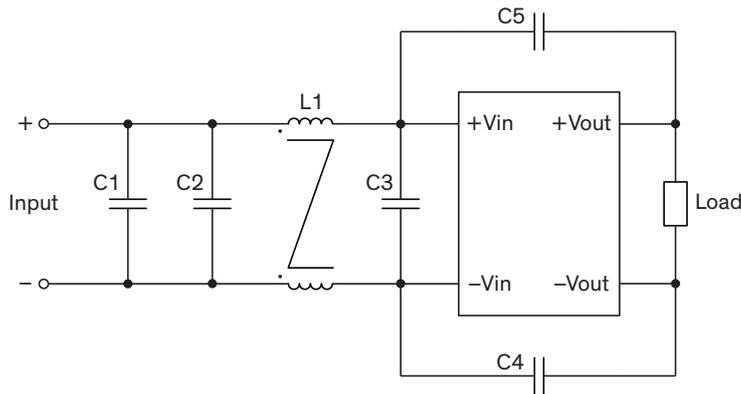
#### Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class A limits

THN 20 series meet EN 55032 Conducted and Radiated Emissions Class A without external components.

#### Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class B limits

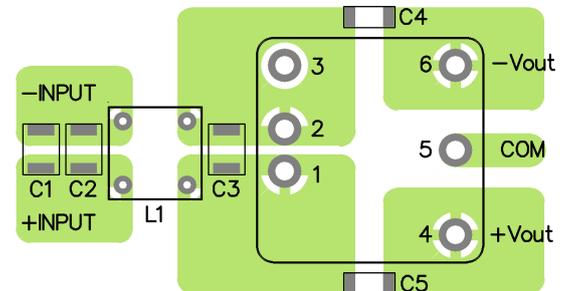
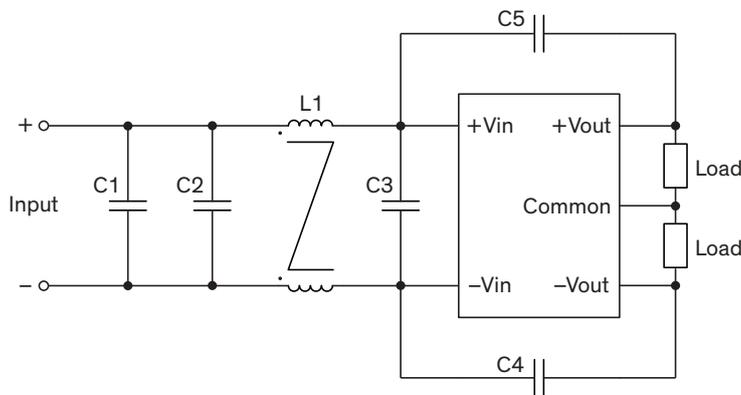
##### Single output models

##### PCB layout suggestion



##### Dual output models

##### PCB layout suggestion



#### Suggested components to comply with EN 55032 Conducted and Radiated Emissions Class B limits

Model	C1	C2	C3	C4, C5	L1
THN 20-12xx THN 20-24xx	4.7 $\mu$ F / 25 V 1812 MLCC	-	-	470 pF / 2 kV 1808 MLCC	325 $\mu$ H / 3.3 A TCK-050
THN 20-48xx	2.2 $\mu$ F / 100 V 1812 MLCC	2.2 $\mu$ F / 100 V 1812 MLCC	2.2 $\mu$ F / 100 V 1812 MLCC	1'000 pF / 2 kV 1808 MLCC	

TCK-050 datasheet: [www.tracopower.com/overview/tck-050](http://www.tracopower.com/overview/tck-050)