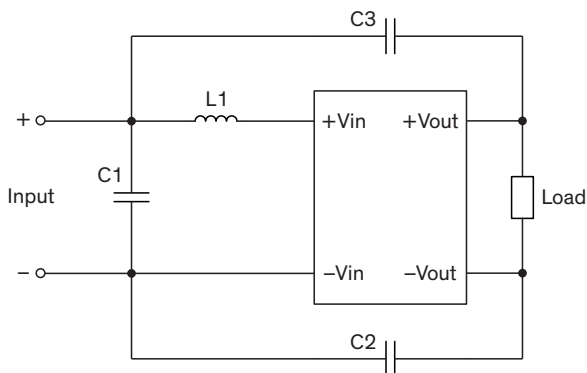


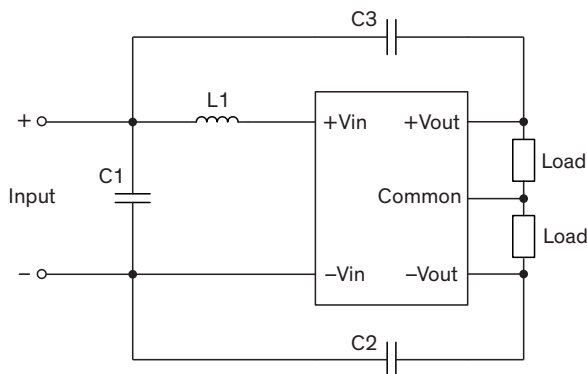
### EMI Consideration

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

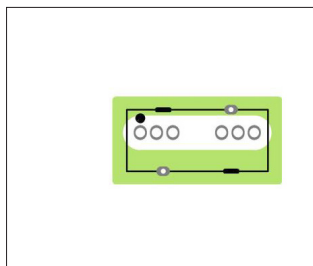
#### Single output models



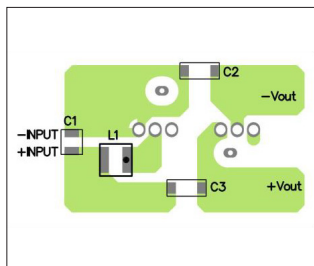
#### Dual output models



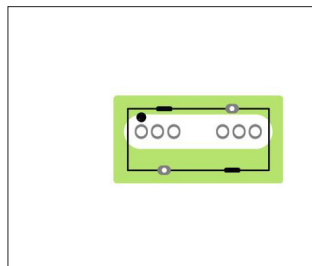
#### PCB layout suggestion Top View



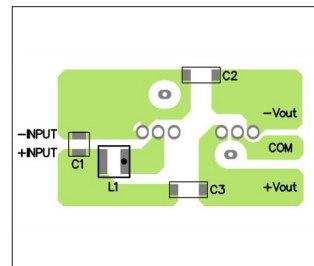
#### Bottom View



#### PCB layout suggestion Top View



#### Bottom View



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

Model	C1	C2	C3	L1
TMR 12-12xxWI	10 $\mu$ F / 25 V 1210 X7R	330 pF / 3 kV 1808 X7R	680 pF / 3 kV 1808 X7R	2.2 $\mu$ H / TCK-171
TMR 12-24xxWI	4.7 $\mu$ F / 50 V 1210 X7R	-		10 $\mu$ H / TCK-172
TMR 12-48xxWI	2.2 $\mu$ F / 100 V 1210 X7R	220 pF / 3 kV 1808 X7R	220 pF / 3 kV 1808 X7R	47 $\mu$ H / TCK-170

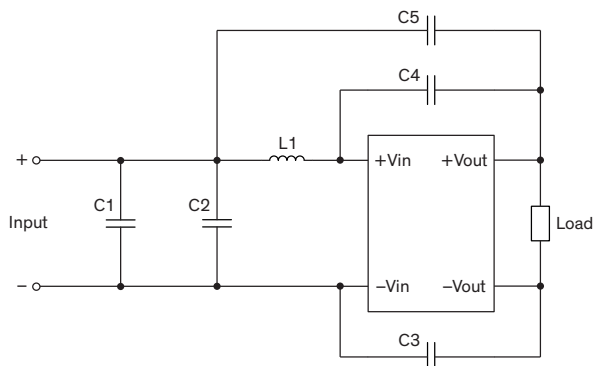
TCK-170 datasheet: [www.tracopower.com/overview/tck-170](http://www.tracopower.com/overview/tck-170)

TCK-171 datasheet: [www.tracopower.com/overview/tck-171](http://www.tracopower.com/overview/tck-171)

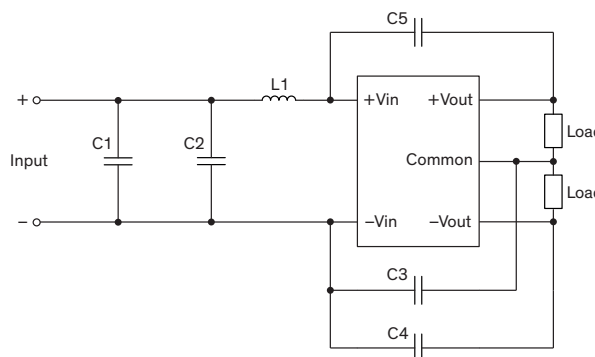
TCK-172 datasheet: [www.tracopower.com/overview/tck-172](http://www.tracopower.com/overview/tck-172)

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

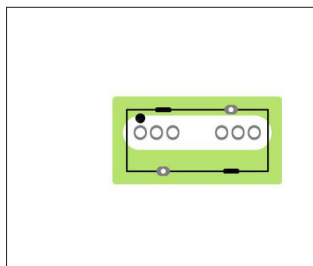
#### Single output models



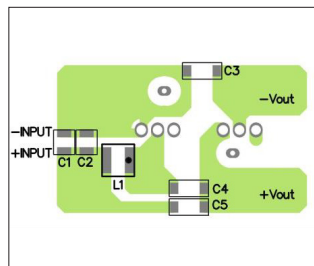
#### Dual output models



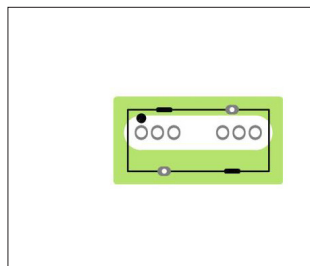
#### PCB layout suggestion Top View



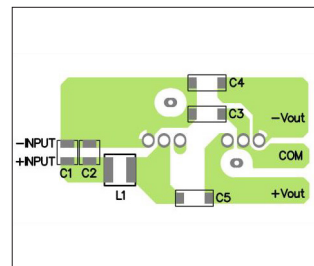
#### Bottom View



#### PCB layout suggestion Top View



#### Bottom View



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

Model	C1, C2	C3	C4	C5	L1
TMR 12-121xWI	22 $\mu$ F / 25 V 1210 X7R	680 pF / 3 kV 1808 X7R	220 pF / 3 kV 1808 X7R	-	2.2 $\mu$ H / TCK-171
TMR 12-241xWI	10 $\mu$ F / 50 V 1210 X7R	2200 pF / 3 kV 1808 X7R	-	470 pF / 3 kV 1808 X7R	10 $\mu$ H / TCK-172
TMR 12-4811WI	4.7 $\mu$ F / 100 V 1210 X7S	2200 pF / 3 kV 1808 X7R	1000 pF / 3 kV 1808 X7R	-	47 $\mu$ H / TCK-170
TMR 12-4819WI					
TMR 12-4812WI					
TMR 12-4813WI					
TMR 12-4815WI					
TMR 12-4810WI		220 pF / 3 kV 1808 X7R	-	470 pF / 3 kV 1808 X7R	
TMR 12-122xWI	22 $\mu$ F / 25 V 1210 X7R	220 pF / 3 kV 1808 X7R	680 pF / 3 kV 1808 X7R	220 pF / 3 kV 1808 X7R	2.2 $\mu$ H / TCK-171
TMR 12-242xWI	10 $\mu$ F / 50 V 1210 X7R		1000 pF / 3 kV 1808 X7R	470 pF / 3 kV 1808 X7R	10 $\mu$ H / TCK-172
TMR 12-482xWI	4.7 $\mu$ F / 100 V 1210 X7S		2200 pF / 3 kV 1808 X7R	1000 pF / 3 kV 1808 X7R	47 $\mu$ H / TCK-170

TCK-170 datasheet: [www.tracopower.com/overview/tck-170](http://www.tracopower.com/overview/tck-170)

TCK-171 datasheet: [www.tracopower.com/overview/tck-171](http://www.tracopower.com/overview/tck-171)

TCK-172 datasheet: [www.tracopower.com/overview/tck-172](http://www.tracopower.com/overview/tck-172)