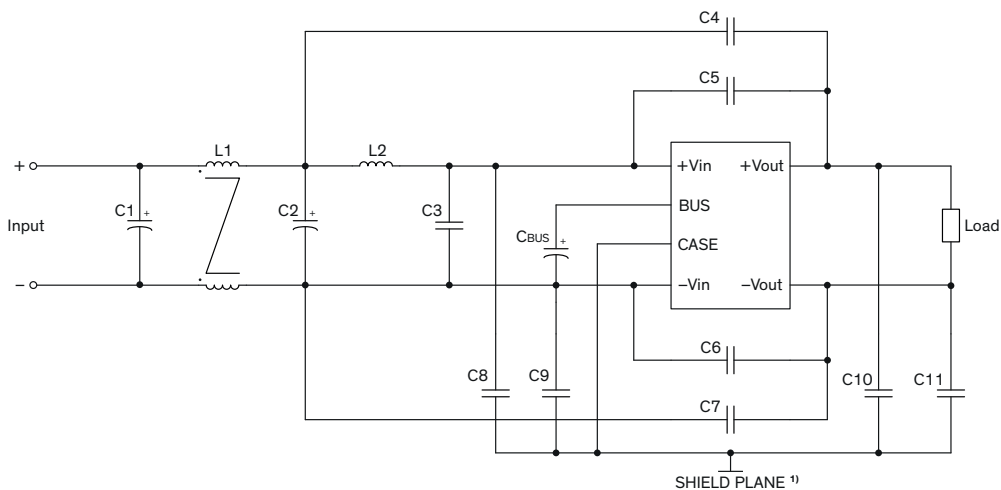
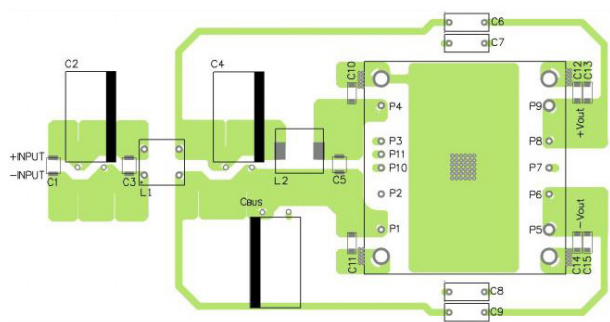


### EMI Consideration

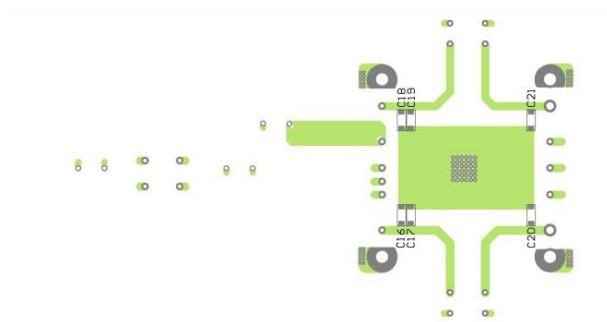
**Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class A limits**



PCB layout suggestion, Top View



PCB layout suggestion, Bottom View



<sup>1)</sup> SHIELD PLANE: floating / isolated

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

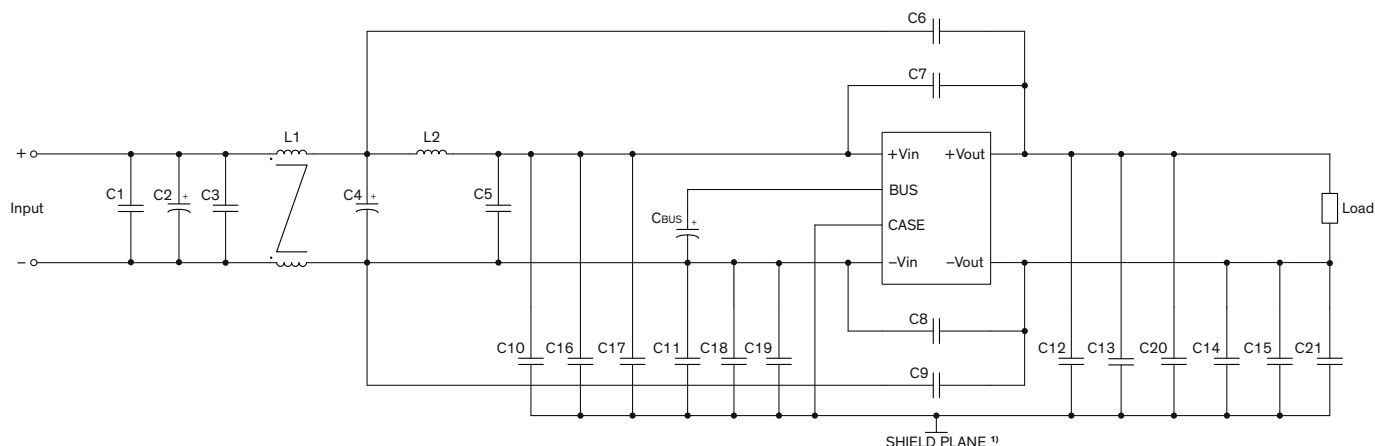
Model	C1, C2, C <sub>BUS</sub> *	C3	C4, C5, C6, C7	C8, C9, C10, C11	L1	L2
TEP 150-xxxxUIR	150 $\mu$ F / 200 V Al. Cap. (lie down) KXJ	1 $\mu$ F / 250 V 1812 MLCC	1000 pF / Y1	330 pF / 250 VAC 1808 MLCC	545 $\mu$ H TCK-183	4.7 $\mu$ H TCK-184

TCK-183 datasheet: [www.tracopower.com/overview/tck-183](http://www.tracopower.com/overview/tck-183)

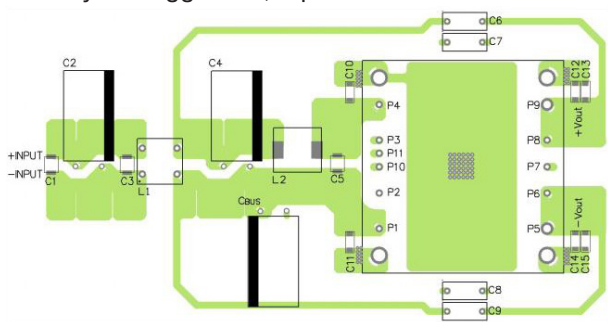
TCK-184 datasheet: [www.tracopower.com/overview/tck-184](http://www.tracopower.com/overview/tck-184)

\* C<sub>BUS</sub> must always be connected

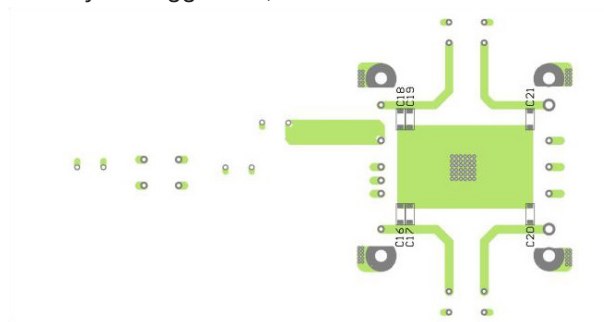
### Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class B limits



PCB layout suggestion, Top View



PCB layout suggestion, Bottom View



<sup>1)</sup> SHIELD PLANE: floating / isolated

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

Model	C1, C3, C5	C2, C4, C <sub>BUS</sub> *	C6, C9	C7, C8	C10, C11, C16, C17, C18, C19
TEP 150-7211UIR TEP 150-7212UIR TEP 150-7213UIR TEP 150-7215UIR	1 $\mu$ F / 250 V 1812 MLCC	150 $\mu$ F / 200 V Al. Cap. (lie down) KXJ	2'200 pF / Y1	3'300 pF / Y1	330 pF / 250 VAC 1808 MLCC
On demand model with 28 Vout	C12, C14	C13, C15	C20, C21	L1	L2
	680 pF / 250 VAC 1808 MLCC	1'000 pF / 250 VAC 1808 MLCC	100 pF / 250 VAC 1808 MLCC	545 $\mu$ H TCK-183	4.7 $\mu$ H TCK-184
TEP 150-7218UIR On demand model with 53 Vout	C1, C3, C5	C2, C4, C <sub>BUS</sub> *	C6, C9	C7, C8	C10, C11, C12, C14, C16, C17, C18, C19
	1 $\mu$ F / 250 V 1812 MLCC	150 $\mu$ F / 200 V Al. Cap. (lie down) KXJ	3'300 pF / Y1	2'200 pF / Y1	330 pF / 250 VAC 1808 MLCC
	C13, C15	C20, C21	L1	L2	
	680 pF / 250 VAC 1808 MLCC	100 pF / 250 VAC 1808 MLCC	545 $\mu$ H TCK-183	4.7 $\mu$ H TCK-184	

TCK-183 datasheet: [www.tracopower.com/overview/tck-183](http://www.tracopower.com/overview/tck-183)

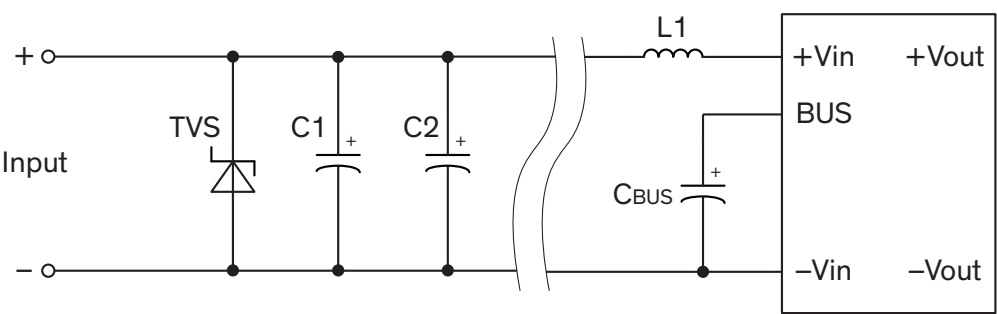
TCK-184 datasheet: [www.tracopower.com/overview/tck-184](http://www.tracopower.com/overview/tck-184)

\* C<sub>BUS</sub> must always be connected

**EMS Consideration**

**Suggested filter to comply with EFT (Burst) & Surge**

**Single output models**



Suggested components to comply with EFT (Burst) & Surge			
Model	C1, C2, C <sub>BUS</sub> *	L1	TVS
TEP 150-xxxxUIR	150 µF / 200 V / KXJ	4.7 µH / PIMC135T-4R7MF	170 V / 3'000 W / SMDJ170A

\* C<sub>BUS</sub> must always be connected