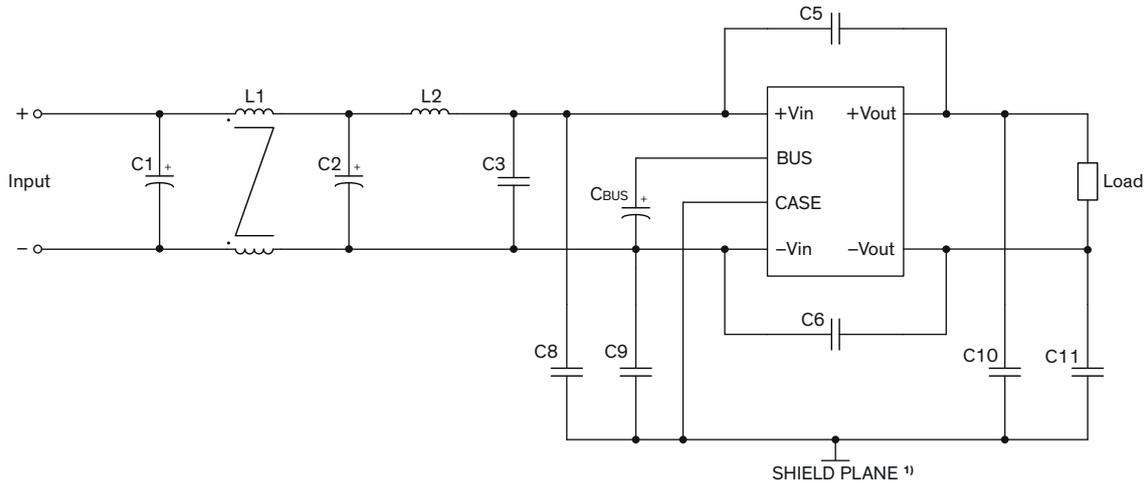


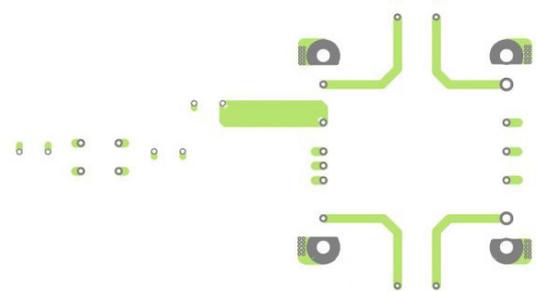
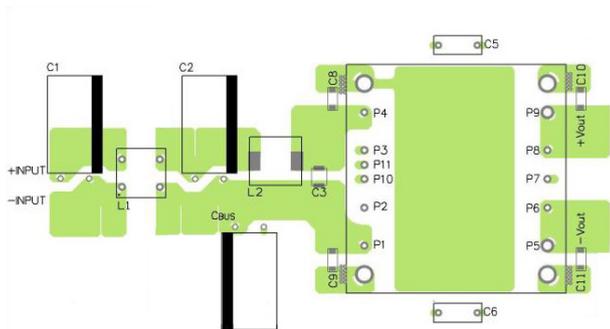
EMI Consideration

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



PCB layout suggestion, Top View

PCB layout suggestion, Bottom View



¹⁾ SHIELD PLANE: floating / isolated

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

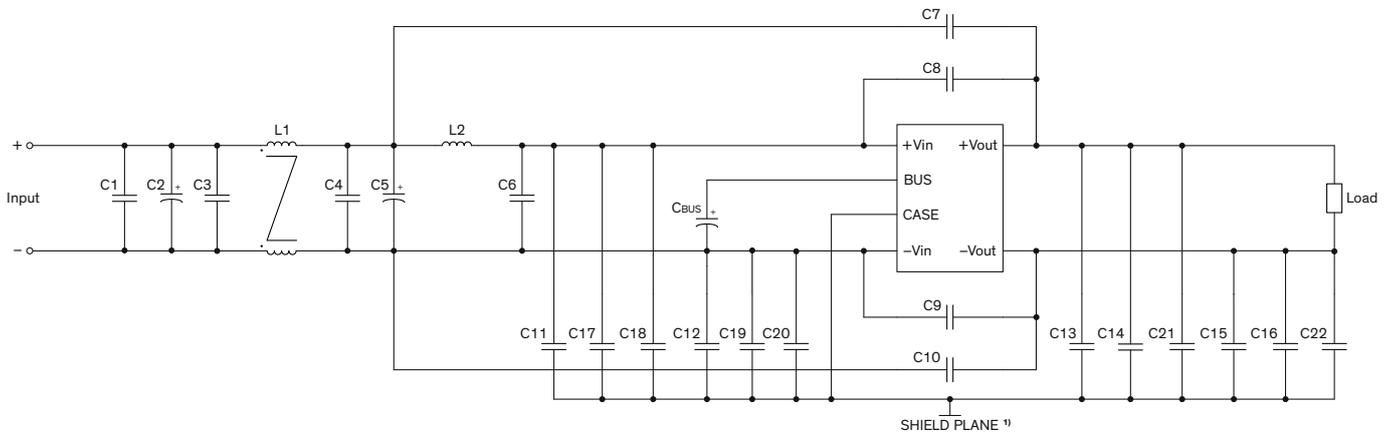
Model	C1, C2, C _{BUS} *	C3	C5, C6	C8, C9
TEP 200-xxxxUIR	150 μ F / 200 V Al. Cap. (lie down) KXJ	1 μ F / 250 V 1812 MLCC	1000 pF / Y1	330 pF / 250 VAC 1808 MLCC
	C10, C11	L1	L2	
	1000 pF / 250 VAC 1808 MLCC	415 μ H TCK-185	3.3 μ H TCK-186	

TCK-185 datasheet: www.tracopower.com/overview/tck-185

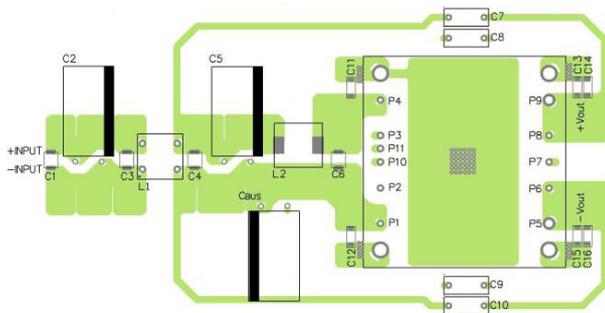
TCK-186 datasheet: www.tracopower.com/overview/tck-186

* C_{BUS} must always be connected

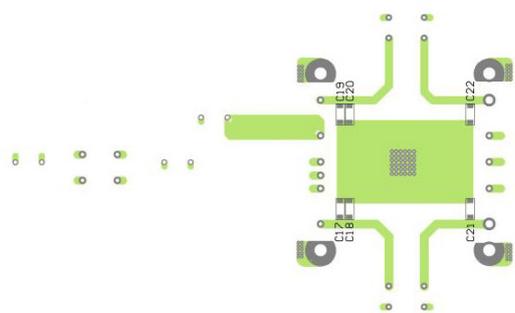
Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class B limits



PCB layout suggestion, Top View



PCB layout suggestion, Bottom View



¹⁾ SHIELD PLANE: floating / isolated

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

Model	C1, C3, C4, C6	C2, C5, C _{BUS} *	C7, C10	C8, C9	C11, C12, C17, C19	
TEP 200-721UIR TEP 200-7212UIR TEP 200-7213UIR TEP 200-7215UIR	1 μ F / 250 VAC 1812 MLCC	150 μ F / 200 V Al. Cap. (lie down) KXJ	4'700 pF / Y1	3'300 pF / Y1	330 pF / 250 VAC 1808 MLCC	
On demand model with 28 Vout	C13, C14, C15, C16	C18, C20, C21, C22	L1	L2		
	1'000 pF / 250 VAC 1808 MLCC	100 pF / 250 VAC 1808 MLCC	415 μ H TCK-185	3.3 μ H TCK-186		
Model	C1, C3, C6	C2, C5, C _{BUS} *	C4	C7, C10	C8, C9	C11, C12
TEP 200-7218UIR On demand model with 53 Vout	1 μ F / 250 VAC 1812 MLCC	150 μ F / 200 V Al. Cap. (lie down) KXJ	-	4'700 pF Y1	3'300 pF Y1	680 pF / 250 VAC 1808 MLCC
	C13, C15, C17, C18, C19, C20	C14, C16	C21, C22	L1	L2	
	330 pF / 250 VAC 1808 MLCC	1'000 pF / 250 VAC 1808 MLCC	100 pF / 250 VAC 1808 MLCC	415 μ H TCK-185	3.3 μ H TCK-186	

TCK-185 datasheet: www.tracopower.com/overview/tck-185

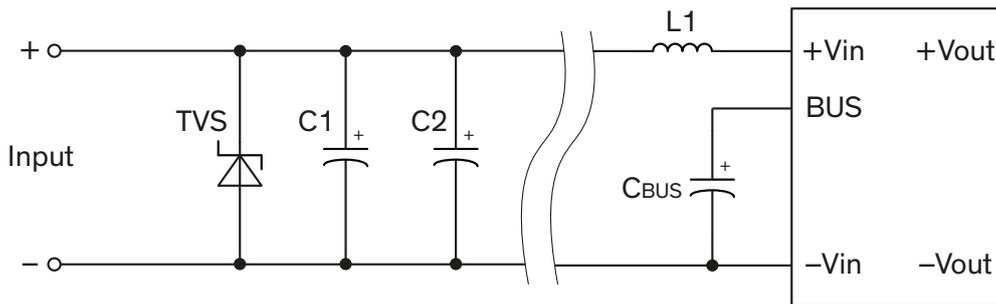
TCK-186 datasheet: www.tracopower.com/overview/tck-186

* C_{BUS} 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 _{BUS} *	L1	TVS
TEP 200-xxxxUIR	150 µF / 200 V / KXJ	3.3 µH / PIMC135T-3R3MF	170 V / 3'000 W / SMDJ170A

* C_{BUS} must always be connected