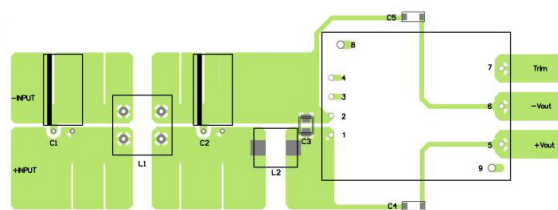
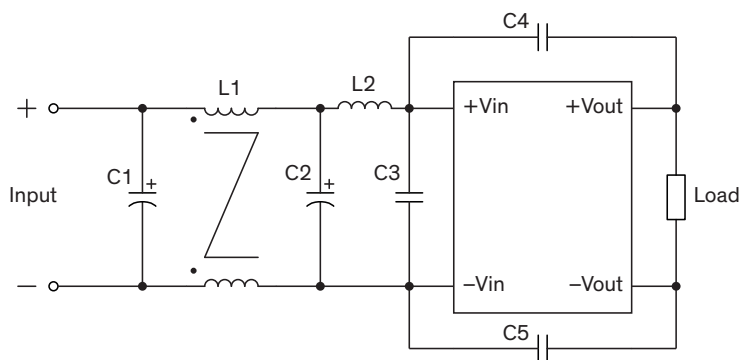


EMI Consideration

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

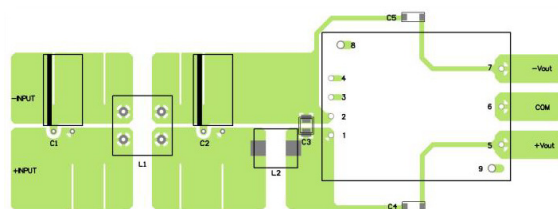
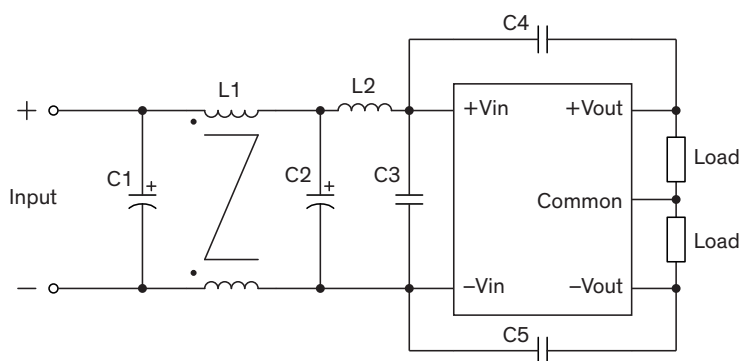
Single output models

PCB layout suggestion



Dual output models

PCB layout suggestion



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

Model	C1, C2	C3	C4, C5	L1	L2
TEN 30-36xxUIR TEN 40-36xxUIR	82 μ F / 100 V / KY Al Cap. (lie down)	2.2 μ F / 100 V 1210 MLCC	1000 pF / 3 kV 1808 MLCC	180 μ H TCK-194	1 μ H TCK-191
TEN 30-72xxUIR TEN 40-72xxUIR	47 μ F / 200 V / KXJ Al Cap. (lie down)	1 μ F / 250 V 1812 MLCC		500 μ H TCK-169	15 μ H TCK-192

TCK-169 datasheet: www.tracopower.com/overview/tck-169

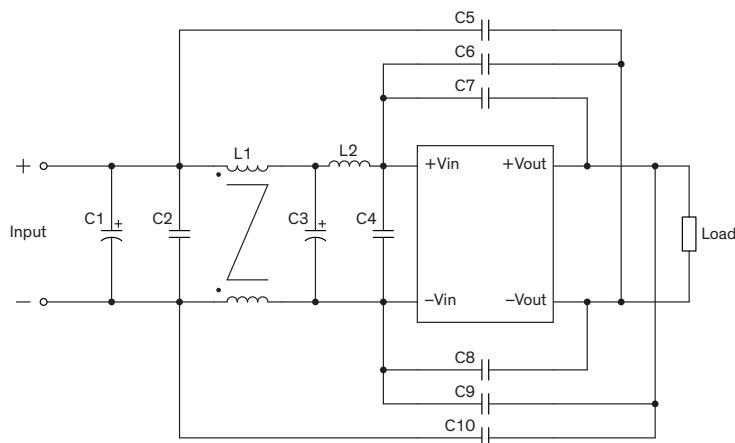
TCK-191 datasheet: www.tracopower.com/overview/tck-191

TCK-192 datasheet: www.tracopower.com/overview/tck-192

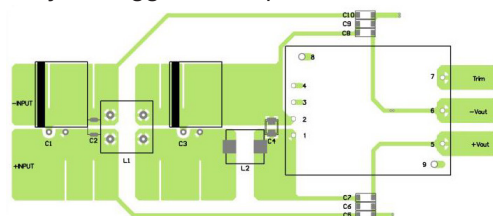
TCK-194 datasheet: www.tracopower.com/overview/tck-194

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

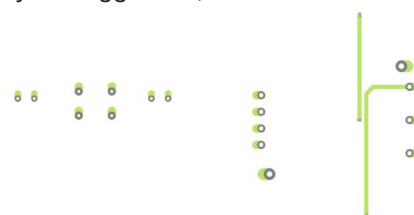
Single output models



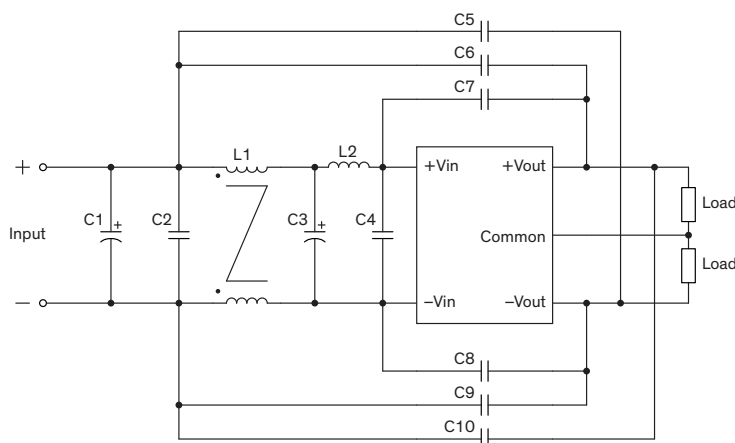
PCB layout suggestion, Top View



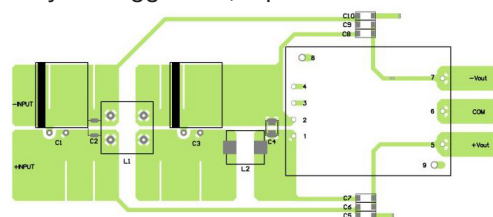
PCB layout suggestion, Bottom View



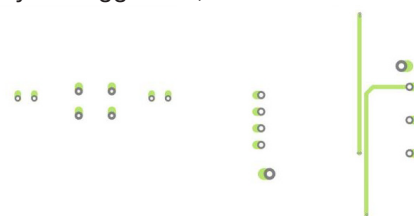
Dual output models



PCB layout suggestion, Top View



PCB layout suggestion, Bottom View



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

Model	C1, C3	C2, C4	C5, C10	C6, C9	C7, C8	L1	L2
TEN 30-361xUIR TEN 40-361xUIR	220 μ F 100 V KZN	2.2 μ F 100 V 1210 MLCC	220 pF 3 kV 1808 MLCC	1000 pF 3 kV 1808 MLCC	150 pF 3 kV 1808 MLCC	285 μ H TCK-103	1 μ H TCK-191
TEN 30-362xUIR TEN 40-362xUIR	AI Cap. (lie down)						2.2 μ H TCK-195

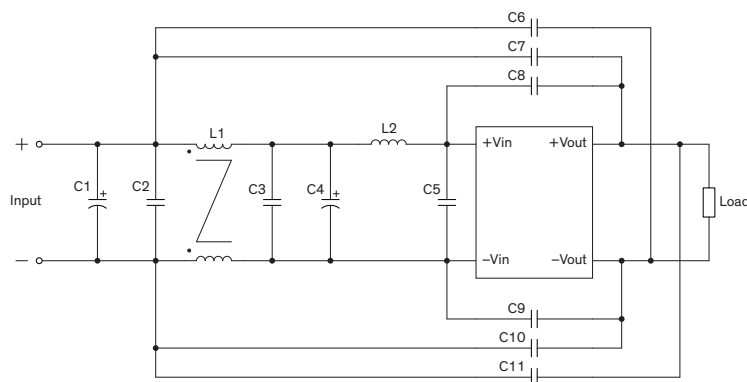
TCK-103 datasheet: www.tracopower.com/overview/tck-103

TCK-191 datasheet: www.tracopower.com/overview/tck-191

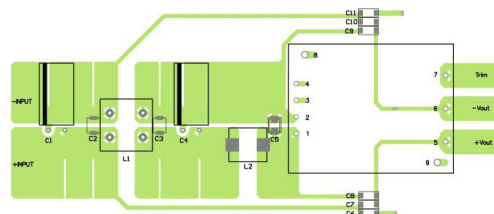
TCK-195 datasheet: www.tracopower.com/overview/tck-195

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

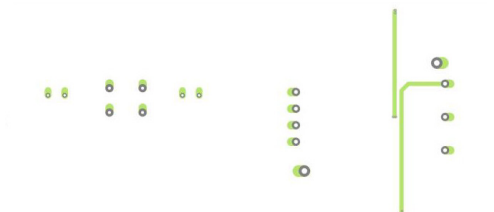
Single output models



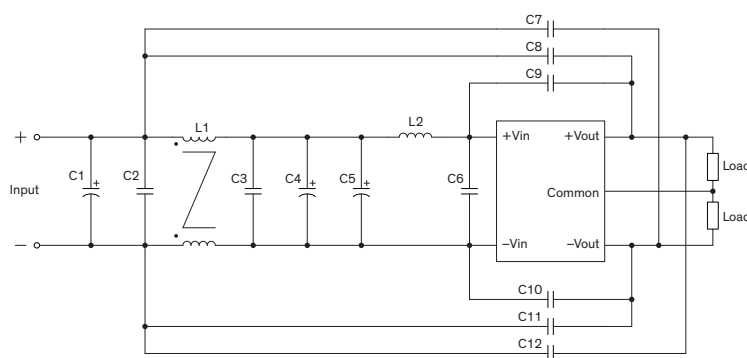
PCB layout suggestion, Top View



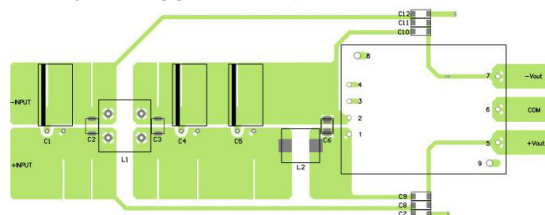
PCB layout suggestion, Bottom View



Dual output models



PCB layout suggestion, Top View



PCB layout suggestion, Bottom View



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

Model	C1, C4	C2, C3, C5	C6, C11	C7, C10	C8, C9	L1	L2
TEN 30-721xUIR TEN 40-721xUIR	47 μF / 200 V / KXJ Al Cap. (lie down)	1 μF / 250 V 1812 MLCC	2200 pF / 3 kV 1808 MLCC	220 pF / 3 kV 1808 MLCC	330 pF / 3 kV 1808 MLCC	620 μH TCK-067	22 μH TCK-193
Model	C1, C4, C5	C2, C3, C6	C7, C8, C11, C12	C9, C10	L1	L2	
TEN 30-722xUIR TEN 40-722xUIR	47 μF / 200 V / KXJ Al Cap. (lie down)	0.47 μF / 250 V 1812 MLCC	220 pF / 3 kV 1808 MLCC	330 pF / 3 kV 1808 MLCC	620 μH TCK-067	22 μH TCK-193	

TCK-067 datasheet: www.tracopower.com/overview/tck-067

TCK-193 datasheet: www.tracopower.com/overview/tck-193