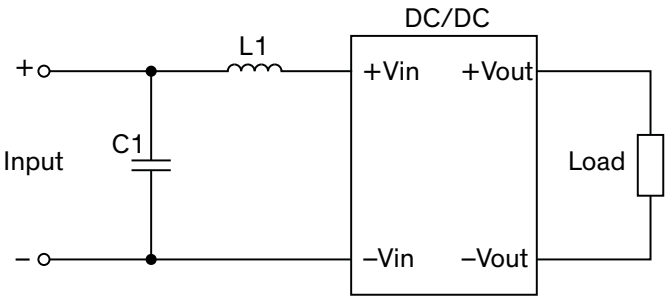
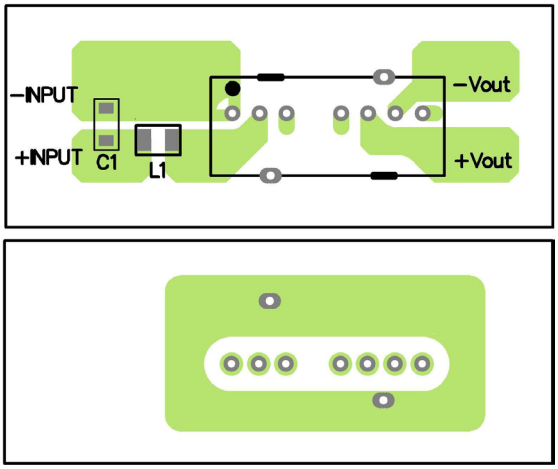
EMI Consideration

Suggested filter to comply with EN 55032 Class A limits

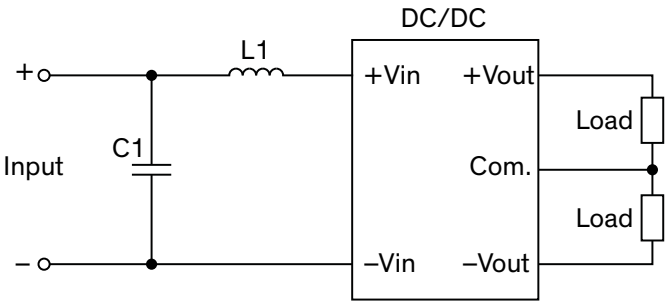
Single output models



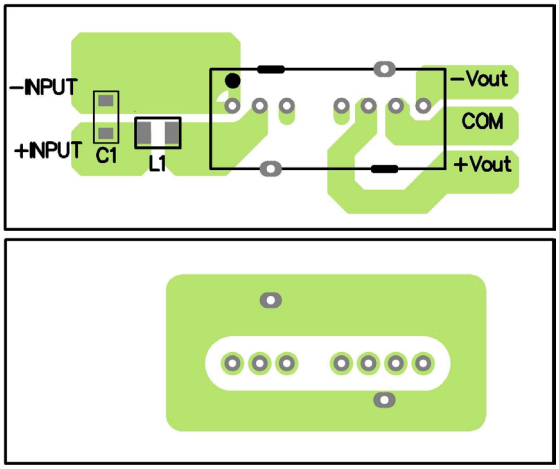
PCB layout suggestion (top/bottom)



Dual output models



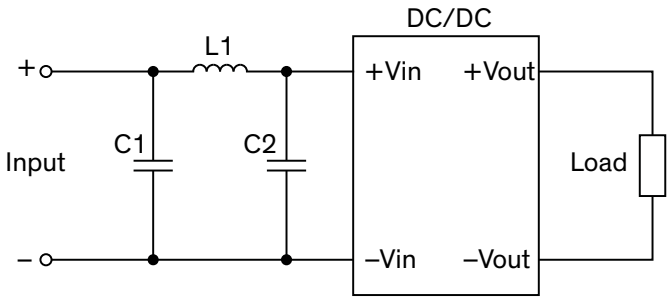
PCB layout suggestion (top/bottom)



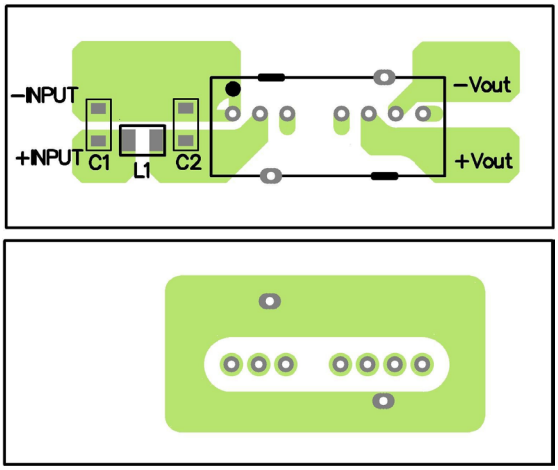
Suggested components to comply with EN 55032 Class A limits		
Model	**C1**	**L1**
TVN 3-05xx	10 µF / 25 V 1206 MLCC	4.7 µH / 1.2 A / 0.14 Ohm SMD Inductor: TCK-151
TVN 3-12xx	10 µF / 25 V 1206 MLCC	10 µH / 1.0 A / 0.35 Ohm SMD Inductor: TCK-146
TVN 3-24xx	4.7 µF / 50 V 1206 MLCC	15 µH / 0.6 A / 0.6 Ohm SMD Inductor: TCK-147
TVN 3-48xx	2.2 µF / 100 V 1206 MLCC	82 µH / 0.25 A / 2.8 Ohm SMD Inductor: TCK-148

Suggested filter to comply with EN 55032 Class B limits

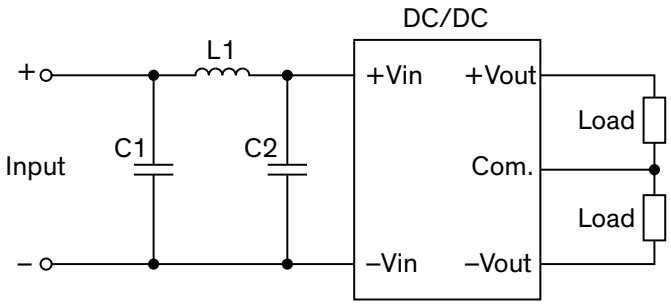
Single output models



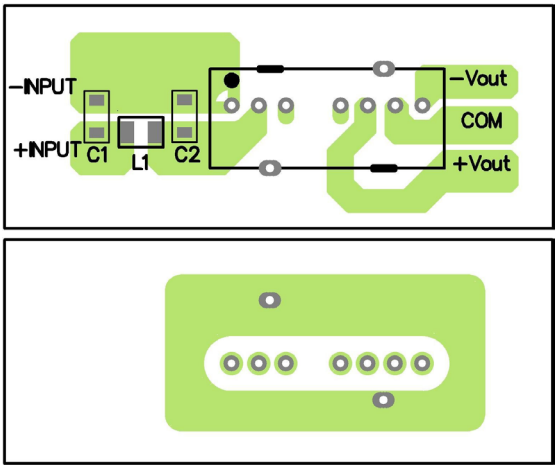
PCB layout suggestion (top/bottom)



Dual output models



PCB layout suggestion (top/bottom)



Suggested components to comply with EN 55032 Class B limits			
Model	**C1**	**C2**	**L1**
TVN 3-05xx	22 µF / 25 V 1206 MLCC	22 µF / 25 V 1206 MLCC	4.7 µH / 1.2 A / 0.14 Ohm SMD Inductor: TCK-151
TVN 3-12xx	10 µF / 25 V 1206 MLCC	10 µF / 25 V 1206 MLCC	15 µH / 0.6 A / 0.6 Ohm SMD Inductor: TCK-147
TVN 3-24xx	10 µF / 50 V 1206 MLCC	10 µF / 50 V 1206 MLCC	15 µH / 0.6 A / 0.6 Ohm SMD Inductor: TCK-147
TVN 3-48xx	2.2 µF / 100 V 1206 MLCC	2.2 µF / 100 V 1206 MLCC	82 µH / 0.25 A / 2.8 Ohm SMD Inductor: TCK-148

TCK-146 datasheet: www.tracopower.com/products/tck146.pdf
TCK-147 datasheet: www.tracopower.com/products/tck147.pdf
TCK-148 datasheet: www.tracopower.com/products/tck148.pdf
TCK-151 datasheet: www.tracopower.com/products/tck151.pdf