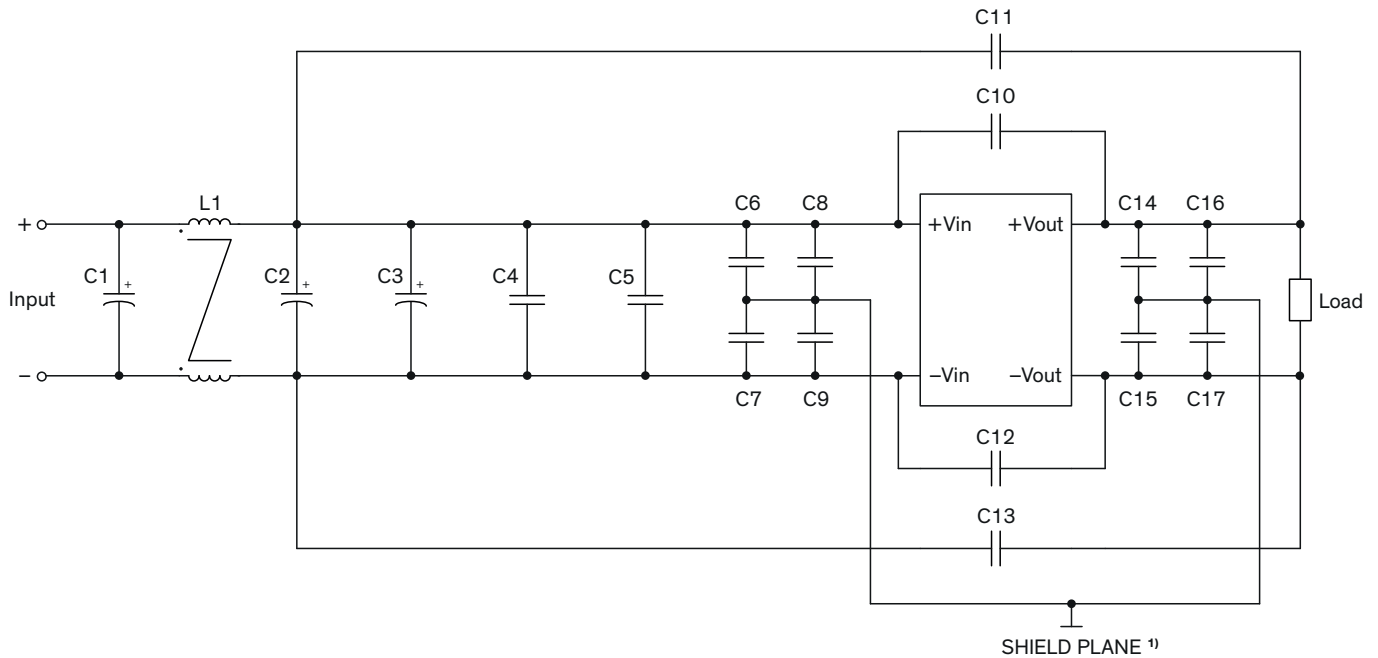
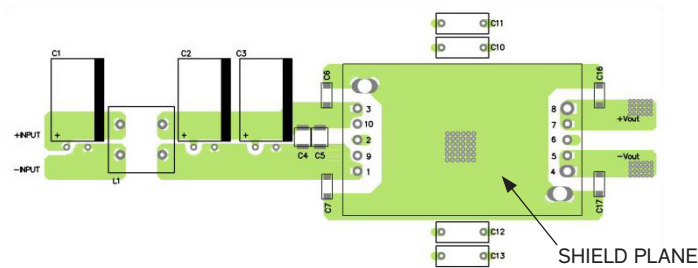


EMI Consideration

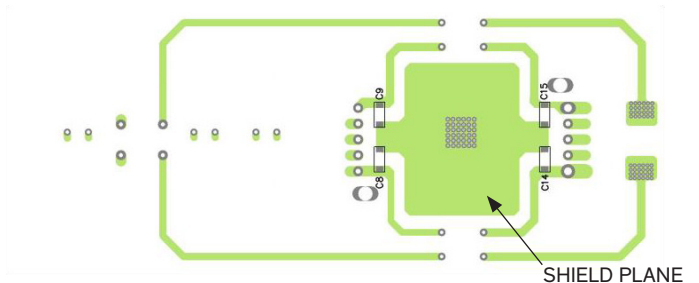
Suggested filter to comply with EN 55032 Conducted and Radiated Emissions Class A limits



PCB layout suggestion Top:



PCB layout suggestion Bottom:



¹⁾ SHIELD PLANE: floating / isolated

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

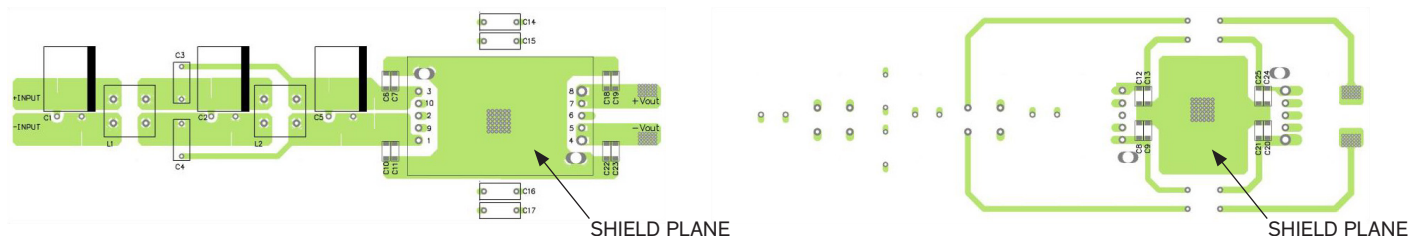
Model	C1, C2	C3	C4, C5	C6, C7, C8, C9, C14, C15, C16, C17	C10, C11, C12, C13	L1
TEP 100-36xxUIR	220 μ F / 100 V KY	-	4.7 μ F / 100 V 1812 MLCC	1000 pF / 3 kV 1808 MLCC	1000 pF / Y1	285 μ H TCK-103
TEP 100-72xxUIR	150 μ F / 200 V KXJ	150 μ F / 200 V KXJ	1 μ F / 250 V 1812 MLCC			500 μ H TCK-169

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

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

The schematic diagram illustrates a 100 W GaN power amplifier. The input section features a matching network with capacitors C1, C2, C3, and C4, and inductors L1 and L2. The baseplate section includes capacitors C6 through C13. The output stage consists of a GaN device with capacitors C14, C15, C16, and C17, and a load network with capacitors C18 through C25. A shield plane is shown at the bottom.

PCB layout suggestion Bottom:



1) SHIELD PLANE: floating / isolated

Suggested components to comply with EN 55032 Conducted and Radiated Emissions Class B limits						
Model	C1, C2, C5	C3, C4	C6, C8, C10, C12, C18, C20, C22, C24	C7, C9, C11, C13, C19, C21, C23, C25	C14, C15, C16, C17	L1, L2
TEP 100-36xxUIR	220 µF / 100 V KY	1000 pF / Y1	2200 pF / 3 kV 1808 MLCC	2200 pF / 3 kV 1808 MLCC	2200 pF / Y1	285 µH TCK-103
TEP 100-72xxUIR	150 µF / 200 V KXJ			-		500 µH TCK-169

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