

Spectra Trading (Pty) Ltd

Reg No: 2025/525554/07

Inductor Types & Specifications

Inductor Type	Inductance Range	Current Rating	Core Material	Package Type	Typical Applications
Air Core Inductor	1 μ H – 100 μ H	Up to 5A	No core (air)	Through-hole, SMD	RF circuits, high-frequency filtering
Iron Core Inductor	10 μ H – 100mH	Up to 10A	Laminated iron	Through-hole	Power supplies, audio equipment
Ferrite Core Inductor	1 μ H – 10mH	0.1A – 20A	Ferrite	SMD, toroidal, axial	EMI suppression, DC-DC converters
Toroidal Inductor	10 μ H – 100mH	0.5A – 50A+	Ferrite or powdered iron	Toroidal ring	Power filtering, energy storage, inverters
Multilayer Chip Inductor	0.1 μ H – 10 μ H	Up to 1A	Ceramic/ferrite	SMD	Mobile devices, RF modules, compact circuits
Power Inductor	1 μ H – 100 μ H	1A – 50A+	Ferrite, iron powder	SMD, shielded/unshielded	Voltage regulation, buck/boost converters
Variable Inductor	10 μ H – 1mH (adjustable)	Up to 5A	Ferrite/air	Through-hole	Tuned circuits, oscillators, RF tuning
Common Mode Choke	10 μ H – 100mH	Up to 10A	Ferrite	SMD, toroidal	Noise filtering, signal integrity, power line EMI suppression