ABRACON

Innovation For Tomorrow's Designs®

Inductor Catalog

ABRACON
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About Abracon

We deliver cutting-edge, innovative electronic components that enable our customers to realize next-generation applications. We are committed to providing unmatched technical expertise coupled with service excellence, ensuring our customers receive exceptional value. With our world-class global distribution network, we expedite time-to-market and help ensure our customers' success in creating market-leading products.

KEY MARKET SEGMENTS

- Communication
- Consumer Electronics
- Industrial
- Medical
- Transportation
- Aerospace & Defense

Inductors & Connectivity

Power Inductors
High power and Ultra high performance

RF
Inherent immunity to EMI, high temperature

RJ45
With integrated magnetics
PoE, 10G to 100Mbps, SMD/PIH

LAN Transformers
Compatible with wide a set of Ethernet PHY chipsets supporting VOIP, PoE, PoE+ and PoE++

Ferrite Beads
Used to filter out high frequency switching noise/signals

Common Mode Chokes
Eliminate unwanted interference in high-speed, differential mode signal transmission applications

RF & Antennas

Chip Antennas
Improve RF range, sensitivity compared to PCB antennas

Niche
ProAnt Patented PCB Integrated Antennas

OnBoard Stamped Metal
Support the Planar Inverted F Antenna (PIFA) Technology

Patch Antennas
Best sensitivity vs size compromise

Flexible Antennas
Low profile, multi-band, easy installation

Whip
External Antennas

External Antennas
Best sensitivity and range performance

RFID
Antennas and fully integrated tags

Filters
Small & Low profile, Low insertion loss, excellent selectivity

Frequency Control & Timing Devices

Quartz Crystals (XTAL)
MHz or kHz, SMD or through-hole

Quartz Oscillators (XO)
MHz or 32.768kHz, SMD or through-hole

MEMS Oscillators
General purpose or high performance

Real Time Clock (RTC)
Lowest power, highly integrated & accurate

Precision Quartz (XO/VCXO/TCXO/OCXO)
Accurate temp compensation, low jitter/ noise

ABRACON

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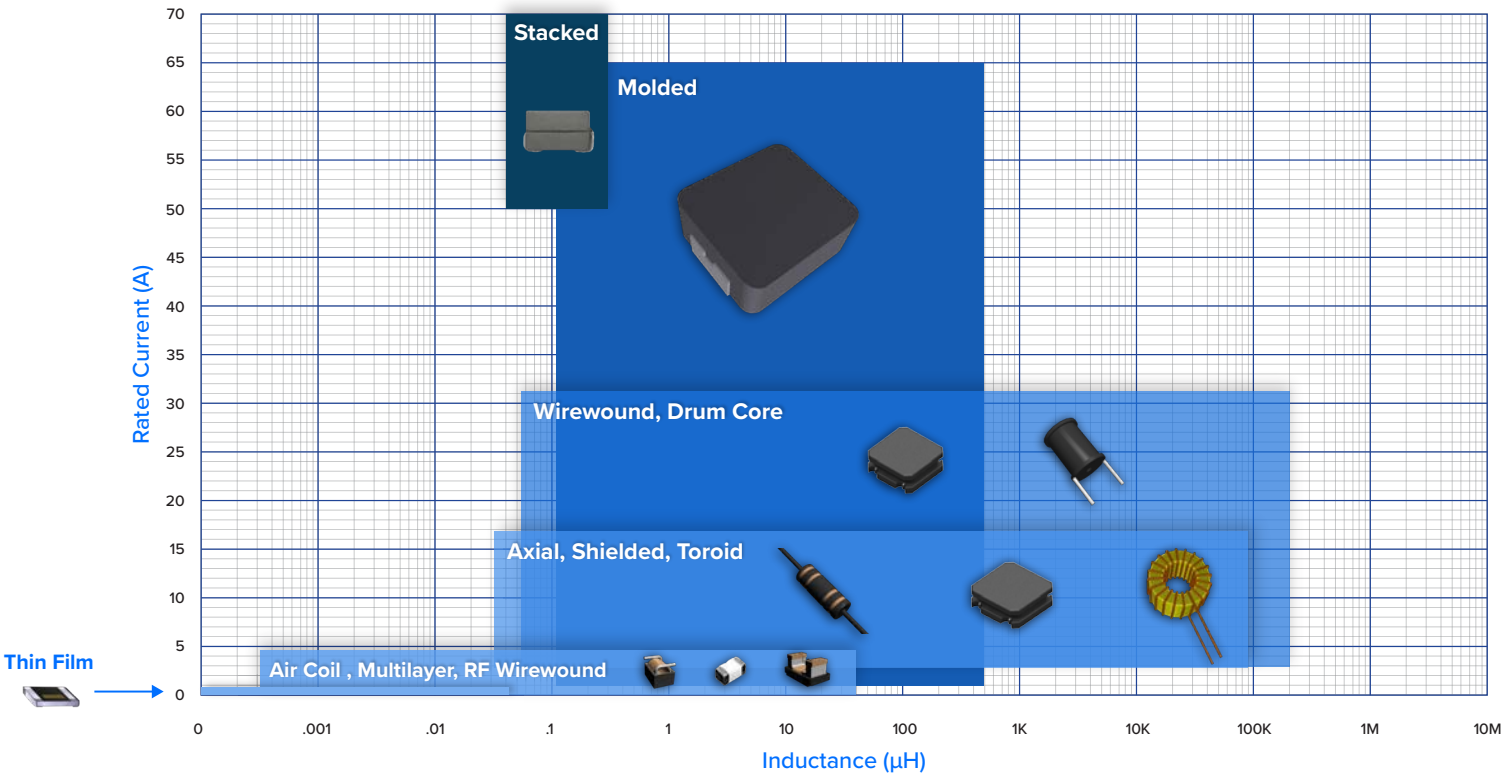
INDUCTOR CHART



Abracon Power Inductor Families

SMD					THROUGH-HOLE		
STACKED	MOLDED	MULTILAYER	WIREWOUND	SHIELDED	AXIAL	DRUM CORE	TOROIDAL
AMSLA	AMPLA AMDLA AMXLA AMELA ASPI(AIG)-F ASPI(AIG)-Q	AIMC AIML ASMPL ASMPH ASMPM	ASPI	ASPI ASPIAIG-S	AIAM AIAP AIAS	AIRD AISR AIUR	ATCA

Abracon RF Inductor Families

AIR COIL	RF WIREWOUND	THIN FILM
AIAC	AISC AISM	ATFC

INDUCTOR APPLICATION NOTE

INDUCTOR TYPES

OVERVIEW

Inductors are available in a variety of package sizes and construction types. The materials and processes used in the construction of an inductor can give the component certain properties, such as package size, electrical performance or cost, that can be advantageous or required for certain applications. Abracon's available inductor types are outlined below. Inductor type is an essential consideration when selecting the appropriate component for an application.

Air Coil

Air coils do not have a magnetic core. Most inductors utilize magnetic materials to increase the inductance value per wire winding by increasing magnetic flux densities. Magnetic flux is not always necessary since RF applications require low inductance values for high frequencies. The air coil handles higher current than other RF inductors, such as the multilayer and wirewound types. The rated current is based on the heating of the wire alone since the current is not dependent on the magnetic saturation. The nature of the air coil is thick wire with spaced out windings creating low DCR and low capacitance parasitics. This results in a high Q product useful for RF applications requiring high current.

Axial

The name axial describes the lead locations on the inductor. Copper wire is wrapped around a ferrite magnetic core and the leads are located at opposite ends of the inductor rather than together from the same end. The axial inductors include a coat of epoxy to increase durability and performance. The color bands printed on the exterior of the inductor help identify the inductance value. Axial inductors support high current ratings and a wide range of inductance values making them suitable for both RF and power applications. Axial inductors are a recommended cost-competitive solution for applications with loose performance requirements.

Drum Core

The drum core inductor is a wirewound, through-hole component with visual characteristics of a traditional drum. These inductors come unshielded, shielded or in heat shrink tubing. The drum core is designed for high inductance filtering or power conversion at frequencies below 100KHz. These types are generally larger and taller than a SMD product because of the number of turns needed to achieve high inductance values. The leads of the inductor reduce the risk of vibrations or handling from demounting the product which could happen in high inductance SMD product. This product will be found closer to the power line side of electronics.

INDUCTOR APPLICATION NOTE

INDUCTOR TYPES

Multilayer

The name multilayer references the construction process of the inductor where layers of ceramic materials are laminated together. Lamination, terminal finish and conductive patterns can vary to optimize for self-resonant frequency (SRF), Q value and DCR specifications. In RF applications, multilayer inductors support higher current ratings and inductance values. In power applications, the multilayer inductor is used for power conversion in miniaturized devices.

Plastic Molded

A plastic molded inductor is a wirewound coil encapsulated by a plastic mold. In contrast to traditional wirewound inductors, the molded inductor's plastic material is pressed into a mold around a coil of wire. Plastic molded inductors are a cost competitive alternative to the metal alloy mixed molded inductors. Additionally, they offer superior current capacity and efficiency when compared to unshielded inductors.

Metal Alloy

A molded inductor is a coil pressed and encapsulated by different types of iron powder mixes. In contrast to traditional wirewound inductors, the molded inductor's magnetic powder material is pressed into a mold around a coil of wire. Molded inductors offer better efficiency, shielding, and power density when compared to all other inductors. A key factor contributing to the increased performance is the complete encapsulation of the core, achieved by using the powder materials to fill in the air gaps around the coils of wire,. The encapsulation and material selection provide for superior current capacity and efficiency. Additionally, most molded powders are a metal alloy mix as opposed to ferrite. This allows for much softer inductor saturation.

Resin Shielded

Resin shielded inductors are classified as a partially shielded SMD inductor. A magnetic liquid coats the wire wound wrapped magnetic core. The magnetic liquid is then hardened during a special baking process. Resin shielded inductors are in between shielded and unshielded wirewound inductors in terms of performance and cost. Resin shielded inductors are a good choice for applications requiring compact power conversion with tight budget constraints.

RF Wirewound

RF wirewound inductors are recommended for applications that require low cost solutions in a compact package size. RF wirewound inductors offer greater performance in Q value, DCR and current rating over other RF inductors, such as thin film and multilayer types. RF wirewound inductors feature a copper wire wrapped around a core material, typically ceramic or ferrite. Ceramic is a nonmagnetic material with a low expansion thermal coefficient. This allows for superior inductance stability across the operating temperature range. Ferrite core RF wirewound inductors are an affordable option for general power conversion applications. Ceramic wirewound inductors are a good option for high frequency applications requiring high Q values, low DCR values, and minimal core losses.

INDUCTOR APPLICATION NOTE
INDUCTOR TYPES

Sleeve Shielded

Shielded wirewound inductors come in several different forms of SMD inductors. This inductor type uses a magnetic sleeve to cover the wirewound wrapped magnetic core. This sleeve limits the radiation of magnetic fields resulting from induced current. Shielding is essential to meet FCC and other national emission standards as the industry moves to higher current requiring loads. The shielded sleeve is also important for reducing EMI and limiting the effect of power electronics on nearby sensitive circuitry. The shielded sleeve increases the performance of the inductor in more ways than one. Additional magnetic material around the wire adds higher current density and higher inductance per turn. This allows for a reduction in wire material per inductance. In turn, this decreases the DCR and increases the current handling capabilities. The shielded sleeve inductor delivers a higher performance than unshielded wirewound inductors at a slightly higher cost.

Thin Film

Thin-film inductors are manufactured using photo lithography similar to the silicon fabrication process. This creates highly precise inductors with low tolerance and high SRF. Thin-film inductors are the preferred choice for RF circuitry such as oscillation circuits, antenna impedance matching and high frequency filtering. The most popular applications for this inductor type include wireless LAN, Bluetooth, GPS, and GSM.

Toroidal

Toroidal inductors use toroid shaped magnetic cores with copper windings. Although it is wirewound, it is not categorized as such because of its distinguishable shape. This inductor is often referred to as shielded because the shape of the core. It results in minimized magnetic leakage similar to that of a shielded wirewound inductor. These through-hole components work best for high inductance applications at low frequencies such as switching regulators, refrigerators and medical devices. There are inherent difficulties in the production of this product that results in cost disadvantages. Drum core inductors are often used as a substitute when applicable.

Unshielded

Unshielded wirewound inductors consist of a copper wire wrapped around an SMD magnetic core. This inductor type does not include added shielding properties or increased inductance of added magnetic material around the wire. For this reason, the performance is lower when compared to shielded wirewound inductors. They offer an affordable option for general power conversion applications.

To read the full white paper, visit abracon.com

AUTOMOTIVE INDUCTORS

AUTOMOTIVE INDUCTORS

- Molded
- Resin Shielded

MOLDED INDUCTORS

APPLICATIONS

AUTOMOTIVE

- In-dash infotainment system
- ADAS
- Keyless entry
- HID/LED exterior lighting (head/tail lights)
- In-cabin lighting
- Stereo systems
- HVAC controls
- Battery management systems
- On-board diagnostic systems
- Distance controllers - LIDAR/ radar systems
- Seat heating/cooling

MOLDED FLAT WIRE

MOLDED ROUND WIRE

	SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
	Molded Flat Wire									
NEW	ASPIAIG-F4020	0.1 - 2.2	5.6 - 18.0	2.4 - 38.7	8.8	14.6	-40°C to +125°C	4.1	4.1	1.9
NEW	ASPIAIG-FLR4020	0.47 - 4.7	3.5 - 12.5	6.8 - 57.2	8.0	11.7	-40°C to +125°C	4.1	4.1	1.9
NEW	ASPIAIG-F5020	0.15 - 1.5	8.8 - 18.8	4.6 - 18.7	10.5	13.8	-40°C to +125°C	5.5	5.3	1.9
NEW	ASPIAIG-F5030	0.15 - 4.7	5.9 - 22.2	2.3 - 36.3	12.2	7.6	-40°C to +125°C	5.5	5.3	2.9
NEW	ASPIAIG-F6030	0.18 - 4.5	7.0 - 32.0	1.8 - 25.3	18.0	6.1	-40°C to +125°C	6.6	6.4	2.8
NEW	ASPIAIG-F6050	1.0 - 8.2	6.2 - 18.0	4.5 - 28.6	18.0	4.5	-40°C to +125°C	6.6	6.4	4.8
NEW	AMXLA-Q6030	0.47 - 22.0	2.6 - 18.0	4.0 - 168	13.0	8.0	-55°C to +180°C	7.1	6.6	2.8
NEW	ASPIAIG-F7020	0.27 - 1.0	11.0 - 21.0	3.5 - 10.8	11.0	10.8	-40°C to +125°C	7.8	7.6	1.9
NEW	ASPIAIG-F7030	0.6 - 8.2	5.9 - 23.0	3.2 - 48.7	21.8	5.0	-40°C to +125°C	7.8	7.6	2.9
NEW	AMXLA-Q1040	1.0 - 68.0	2.8 - 24.0	3.0 - 240	24.0	3.0	-55°C to +180°C	11.0	10.0	3.8
NEW	ASPIAIG-Q5030	0.15 - 4.7	5.9 - 22.2	2.3 - 36.3	12.2	7.6	-55°C to +155°C	6.0	5.7	2.9
NEW	ASPIAIG-QLR5050	5.6 - 10.0	5.0 - 7.2	24.2 - 43.0	-	-	-55°C to +155°C	6.0	5.7	4.8
NEW	ASPIAIG-Q7050	2.2 - 5.6	7.0 - 14.0	6.4 - 17.2	-	-	-55°C to +125°C	8.4	8.0	4.8
NEW	ASPIAIG-Q8080	1.8 - 10.0	8.7 - 24.0	4.0 - 22.9	-	-	-55°C to +125°C	8.9	8.5	7.7
NEW	ASPIAIG-F1040	0.15 - 82.0	1.5 - 43.0	0.6 - 320	18.0	3.3	-55°C to +125°C	11.0	10.0	3.8
NEW	ASPIAIG-Q1030	0.28 - 1.5	18.0 - 35.0	1.6 - 6.6	23.0	4.9	-55°C to +155°C	11.9	11.0	2.9
NEW	ASPIAIG-Q1060	0.68 - 10.0	9.0 - 34.0	1.5 - 18.2	28.5	2.3	-55°C to +155°C	11.9	11.0	5.7

MOLDED INDUCTORS

APPLICATIONS

AUTOMOTIVE

- Transmission shifting controllers
- Drive motors (automated mirrors, windshield wiper controller, window)
- Oil/fuel/water pumps
- In-car charging

MOLDED FLAT WIRE

MOLDED ROUND WIRE

	SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
	Molded Flat Wire									
NEW	ASPIAIG-Q1010	2.2 - 150	12.5 - 29.0	2.8 - 19.3	-	-	-55°C to +155°C	11.9	11.0	9.7
NEW	ASPIAIG-F1265	0.15 - 100	4.2 - 55.0	0.6 - 165	30.0	2.3	-55°C to +125°C	13.5	12.5	6.2
NEW	ASPIAIG-Q1510	4.7 - 33.0	13.0 - 30.0	3.8 - 20.0	-	-	-55°C to +155°C	17.5	16.5	9.7
NEW	ASPIAIG-Q1513	4.7 - 33.0	14.0 - 31.0	3.3 - 22.2	-	-	-55°C to +155°C	17.5	16.5	12.7
	Molded Round Wire									
NEW	AMDLA3010Q	0.47 - 10.0	1.0 - 6.0	18.0 - 290	4.0	36.0	-55°C to +125°C	3.4	3.0	1.8
NEW	AMDLA3020Q	0.22 - 10.0	1.2 - 9.0	10.0 - 260	5.0	36.0	-55°C to +125°C	3.4	3.0	2.0
NEW	AMDLA4010Q	0.68 - 10.0	1.0 - 4.5	30.0 - 400	3.5	48.0	-55°C to +125°C	4.4	4.0	1.0
NEW	AMDLA4012Q	0.47 - 15.0	1.2 - 8.0	11.0 - 275	5.5	21.0	-55°C to +125°C	4.4	4.0	1.8
NEW	AMDLA4020Q	0.12 - 22.0	0.9 - 12.0	5.0 - 460	5.5	21.0	-55°C to +125°C	4.5	4.0	2.0
NEW	AMPLA4012Q	0.1 - 22.0	0.8 - 11.5	5.5 - 1050	4.0	47.0	-55°C to +125°C	4.5	4.1	1.2
NEW	AMPLA4020Q	0.1 - 22.0	1.2 - 14.0	4.0 - 500	5.0	27.0	-55°C to +125°C	4.5	4.1	2.0
NEW	AMDLA4530Q	0.1 - 4.7	4.0 - 32.0	2.1 - 52.0	8.5	13.8	-55°C to +155°C	4.9	4.7	3.0
NEW	AMPLA5030Q	0.10 - 33.0	1.6 - 23.0	3.0 - 440	7.0	14.0	-55°C to +125°C	5.7	5.2	3.0
NEW	AMPLA7012Q	0.1 - 22.0	1.2 - 16.0	4.0 - 600	6.0	30.0	-55°C to +125°C	7.0	6.6	1.2
NEW	AMDLA7030Q	0.15 - 22.0	2.0 - 25.0	2.1 - 190	11.0	7.4	-55°C to +155°C	7.3	6.6	3.0
NEW	AMPLA7030Q	0.1 - 47.0	1.75 - 32.5	1.7 - 363	11.0	10.0	-55°C to +125°C	7.3	6.6	3.0
NEW	AMPLA7050Q	0.22 - 68.0	1.2 - 25.0	1.9 - 445	15.0	6.5	-55°C to +125°C	7.3	6.6	5.0
NEW	AMDLA1004Q	0.15 - 100	2.0 - 44.0	0.6 - 310	20.0	3.3	-55°C to +155°C	11.0	10.0	4.0
NEW	AMDLA1306Q	0.1 - 100	3.8 - 60.0	0.25 - 161	29.0	1.8	-55°C to +155°C	13.5	12.6	6.5
NEW	AMPLA1707Q	0.45 - 100	5.3 - 62.0	0.96 - 118	52.0	2.0	-55°C to +125°C	17.6	16.9	7.0
NEW	AMDLA1707Q	0.47 - 82.0	6.5 - 60.0	0.9 - 83.0	46.0	1.3	-55°C to +155°C	17.8	16.9	6.7
NEW	AMDLA2213Q	1.5 - 100	7.5 - 48.0	1.15 - 40.0	48.0	1.2	-55°C to +155°C	23.5	22.0	13.0

RESIN SHIELDED INDUCTORS

APPLICATIONS

AUTOMOTIVE

- Transmission shifting controllers
- Drive motors (automated mirrors, windshield wiper controller, window)
- Oil/fuel/water pumps
- In-car charging

8 SIDED RESIN SHIELDED

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
							L	W	H
8 Sided Resin Shielded									
ASPIAIG-S4035	1.0 - 150	0.5 - 4.5	24.0 - 2280	4.5	24.0	-40°C to +125°C	4.0	4.0	3.5
ASPIAIG-S6055	3.3 - 330	0.6 - 4.6	26.0 - 1603	4.6	26.0	-40°C to +125°C	6.0	6.0	5.5
ASPIAIG-S8050	1.0 - 470	0.6 - 7.2	10.0 - 1540	7.2	10.0	-40°C to +125°C	8.0	8.0	5.0

SMD POWER INDUCTORS

SMD POWER INDUCTORS

- Multilayer
- Plastic Molded
- Molded
- Resin Shielded
- Sleeve Shielded
- Unshielded

MULTILAYER INDUCTORS

APPLICATIONS

CONSUMER ELECTRONICS

- Bluetooth speakers
- E-cigarettes
- Drones
- Portable gaming consoles
- Digital cameras
- Handheld GPS devices

HEALTHCARE

- Wearable medical
- Monitoring equipment (blood sugar – glucose, thermometers, finger pulse/oximeters)

WEARABLES

- Smart watches
- Fitness Trackers
- Smart diving watches
- Exercise wearables

FERRITE MULTILAYER

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A)	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
				@ 1µH			L	W	H
Ferrite Multilayer									
AIML-0402	1.0 - 2.7	0.01 - 0.015	900 - 2000	0.02	900	-55°C to +125°C	1.0	0.5	0.5
ASMPL-0603	0.22 - 1.0	0.8 - 1.2	150 - 400	0.80	400	-40°C to +85°C	1.6	0.8	0.5
AIML-0603HC	0.22 - 10.0	0.06 - 0.08	400 - 500	0.08	400	-55°C to +125°C	1.6	0.8	0.8
AIML-0603	0.068 - 27.0	0.001 - 0.05	300 - 2750	0.03	600	-40°C to +85°C	1.6	0.8	0.8
ASMPH-0603	0.22 - 4.7	0.065 - 1.25	130 - 500	0.80	250	-55°C to +125°C	1.6	0.8	0.8
ASMCI-0603	0.1 - 10.0	0.05 - 0.7	140 - 900	0.19	200	-40°C to +85°C	1.6	0.8	0.8
ASMPL-0805	0.22 - 2.2	0.35 - 1.35	88.0 - 400	0.70	238	-40°C to +85°C	2.0	1.3	0.5
AIML-0805	0.047 - 39.0	0.004 - 0.3	200 - 1500	0.05	400	-55°C to +125°C	2.0	1.3	0.9

MULTILAYER INDUCTORS

APPLICATIONS

CONSUMER ELECTRONICS

- Bluetooth speakers
- E-cigarettes
- Drones
- Portable gaming consoles
- Digital cameras
- Handheld GPS devices

HEALTHCARE

- Wearable medical
- Monitoring equipment (blood sugar – glucose, thermometers, finger pulse/oximeters)

WEARABLES

- Smart watches
- Fitness Trackers
- Smart diving watches
- Exercise wearables

FERRITE MULTILAYER

METAL ALLOY MULTILAYER

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A)	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
				@ 1µH			L	W	H
Ferrite Multilayer									
AIML-1008HC	1.0 - 4.7	1.1 - 1.6	85.0 - 120	1.60	85.0	-40°C to +85°C	2.5	2.0	0.9
AIML-0805HC	1.0 - 10.0	0.8 - 1.3	110 - 300	1.30	110	-40°C to +85°C	2.0	1.3	0.9
AIML-1206	0.047 - 47	0.005 - 0.3	150 - 3400	0.10	400	-40°C to +85°C	3.2	1.6	1.1
Metal Alloy Multilayer									
ASMPH-0805	0.47 - 4.7	0.28 - 1.2	80.0 - 250	1.15	110	-40°C to +85°C	2.0	1.3	0.9
ASMPM-0806	0.47 - 4.7	0.95 - 3.1	40.0 - 360	2.20	70.0	-40°C to +125°C	2.0	1.6	1.0
ASMPH-1008	0.47 - 4.7	0.32 - 1.5	40.0 - 110	1.40	60.0	-55°C to +125°C	2.5	2.0	0.9
ASMCI-0805	0.1 - 10.0	0.06 - 1.0	70.0 - 500	0.30	200	-40°C to +85°C	2.0	1.3	1.3
ASMPH-0806	0.47 - 4.7	0.22 - 1.6	80.0 - 140	1.20	90.0	-40°C to +85°C	2.0	1.6	0.9

PLASTIC MOLDED INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-Cigarettes
- Digital Cameras
- Robotic Vacuums
- Cell phones
- Tablets

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Asset Tracking

IOT

- Industrial IoT
- Wearables
- Portable devices
- Switch mode power supplies (low and high power)
- Bluetooth speakers
- Smart home devices/ control units
- Security Cameras

MOLDED PLASTIC WIREWOUND

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Plastic Molded Wirewound									
AISM-1008	0.01 - 100	0.06 - 0.530	260 - 21000	0.2	1100	-40°C to +105°C	2.5	2.0	1.8
AISM-1210	0.01 - 330	0.04 - 0.45	130 - 34000	0.4	700	-40°C to +85°C	3.2	2.5	2.2
AISM-1812H	1.0 - 330	0.09 - 1.05	110 - 13000	1.1	110	-40°C to +125°C	4.5	3.2	3.2
AISM-1812	0.1 - 150	0.1 - 0.8	200 - 9000	0.5	500	-40°C to +85°C	4.8	3.5	3.5
AISM-2220	1.0 - 1000	0.085 - 1.8	30.0 - 15000	1.8	30.0	-25°C to +85°C	5.9	5.3	5.3

MOLDED INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-Cigarettes
- Digital Cameras
- Robotic Vacuums
- Cell phones
- Tablets

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

HEALTHCARE

- Wearable medical
- Monitoring equipment (blood sugar – glucose, thermometers, finger pulse/oximeters)

MOLDED FLAT WIRE

MOLDED ROUND WIRE

	SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
	Molded Flat Wire									
NEW	AMELA2010S	0.22 - 2.2	.02 - 6.5	17.0 - 105	3.4	53.0	-55°C to +125°C	2.5	2.0	1.0
NEW	AMELA2012S	0.22 - 2.2	2.4 - 8.5	13.0 - 90.0	3.7	45.0	-55°C to +125°C	2.5	2.0	1.2
NEW	ASPI-F7050	2.2 - 5.6	44756.00	6.4 - 17.2	-	-	-55°C to +125°C	8.4	8.0	4.8
NEW	ASPI-F1030	.28 - 1.5	18.0 - 35.0	1.6 - 6.6	23.0	4.95	-40°C to +125°C	11.9	11.0	2.9
NEW	ASPI-F1060	0.68 - 10.0	9.0 - 34.0	1.5 - 18.2	28.5	2.32	-40°C to +125°C	11.9	11.0	5.7
NEW	ASPI-F1010	2.2 - 15.0	12.5 - 29.0	2.8 - 19.3	-	-	-40°C to +125°C	11.9	11.0	9.7
	Molded Round Wire									
NEW	AMDLA3010S	0.15 - 10.0	0.9 - 8.0	12.0 - 430	2.8	48.0	-55°C to +155°C	3.4	3.0	1.0
NEW	AMDLA3020S	0.22 - 10.0	1.3 - 10.0	10.0 - 260	5.0	30.0	-55°C to +155°C	3.4	3.0	2.0
	ASPI-4020HI	0.47 - 6.8	2.4 - 7.5	14.0 - 175	6.0	27.0	-55°C to +125°C	4.2	4.4	2.0
NEW	AMDLA4010S	0.22 - 10.0	1.1 - 11.0	12.0 - 312	4.2	42.0	-55°C to +155°C	4.4	4.0	1.0
NEW	AMDLA4012S	0.33 - 4.7	2.2 - 10.0	14.5 - 143	5.2	43.0	-55°C to +155°C	4.4	4.0	1.2
NEW	AMDLA4020S	0.12 - 22.0	1.2 - 15.0	4.2 - 320	6.5	20.0	-55°C to +155°C	4.4	4.0	2.0
NEW	AMPLA4012S	0.1 - 22.0	0.8 - 11.5	5.5 - 1050	4.0	47.0	-55°C to +125°C	4.5	4.1	1.2
NEW	AMPLA4020S	0.1 - 22.0	1.2 - 13.5	4.0 - 500	5.0	27.0	-55°C to +125°C	4.5	4.1	2.0

MOLDED INDUCTORS

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Asset Tracking

IOT

- Industrial IoT
- Wearables
- Portable devices
- Switch mode power supplies (low and high power)
- Bluetooth speakers
- Smart home devices/ control units
- Security Cameras

MOLDED FLAT WIRE

MOLDED ROUND WIRE

	SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
	Molded Round Wire									
NEW	AMDLA4530S	0.1 - 4.7	4.0 - 32.0	2.1 - 52.0	8.5	13.8	-55°C to +155°C	4.9	4.7	3.0
	ASPI-0520LR	1.0 - 5.6	3.5 - 7.5	18.5 - 75.0	7.5	18.5	-55°C to +155°C	5.6	5.2	2.0
	ASPI-0530LR	1.5 - 5.6	4.0 - 7.0	20.0 - 65.0	7.0	20.0	-55°C to +155°C	5.6	5.2	3.0
	ASPI-0530HI	1.0 - 2.2	5.5 - 7.0	14.0 - 35.0	7.0	14.0	-55°C to +155°C	5.6	5.2	3.0
NEW	AMPLA5030S	0.15 - 22.0	1.7 - 18.0	2.7 - 250	7.0	14.0	-55°C to +155°C	5.7	5.2	3.0
NEW	AMPLA7012S	0.1 - 10.0	1.8 - 16.0	4.0 - 290	6.0	30.0	-55°C to +155°C	7.0	6.6	1.2
	ASPI-0630LR	0.47 - 22.0	2.5 - 18.0	4.1 - 167	12.0	9.0	-55°C to +155°C	7.2	6.7	3.0
NEW	AMHLA7030Q	.15 - 33.0	1.8 - 25.0	2.1 - 258	11.0	7.4	-55°C to +155°C	7.1	6.6	2.8
	ASPI-0630HI	1.0 - 10.0	3.0 - 11.0	10.0 - 105	11.0	10.0	-55°C to +155°C	7.2	6.7	3.0
	ASPI-7318	0.1 - 22.0	2.0 - 32.5	1.7 - 190	11.0	10.0	-55°C to +155°C	7.3	6.6	2.8
NEW	AMDLA7030S	0.15 - 33.0	1.8 - 25.0	2.1 - 258	11.0	7.4	-55°C to +155°C	7.3	6.6	3.0
NEW	AMPLA7030S	0.1 - 47.0	1.75 - 32.5	1.7 - 363	11.0	10.0	-55°C to +155°C	7.3	6.6	3.0
NEW	AMPLA7050S	0.4 - 22.0	2.5 - 23.0	3.7 - 170	15.0	6.5	-55°C to +155°C	7.3	6.6	5.0

MOLDED INDUCTORS

MOLDED FLAT WIRE

MOLDED ROUND WIRE

	SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
	Molded Round Wire									
NEW	ASPI-8030HS	0.22 - 5.6	6.3 - 32.0	1.71 - 37.2	13.7	8.35	-55°C to +125°C	8.2	8.6	2.8
NEW	ASPI-8030LR	0.22 - 33.0	2.1 - 24.0	1.62 - 177	14.8	6.49	-55°C to +125°C	8.2	8.6	2.8
NEW	ASPI-8040HS	0.22 - 10.0	5.2 - 30.7	1.68 - 59.9	18.0	5.78	-55°C to +125°C	8.2	8.6	3.8
NEW	ASPI-8040LR	0.22 - 33.0	3.2 - 22.0	1.35 - 144	18.2	4.63	-55°C to +125°C	8.2	8.6	3.8
NEW	AMDLA1004S	0.15 - 100	2.0 - 44.0	0.6 - 310	20.0	3.3	-55°C to +155°C	11.0	10.0	4.0
NEW	AMPLA1004S	0.15 - 68.0	2.0 - 43.0	0.6 - 240	18.0	3.3	-55°C to +125°C	11.0	10.0	4.0
NEW	ASPI-1040HI	0.22 - 68.0	2.5 - 35.0	1.0 - 195	19.0	3.3	-55°C to +125°C	11.5	10.0	4.0
	ASPI-1367	0.15 - 100	4.2 - 55.0	0.6 - 165	0.0	1.5	-40°C to +125°C	12.9	14.0	6.7
NEW	AMPLA1306S	0.15 - 100	2.5 - 55.0	0.6 - 200	30.0	2.3	-55°C to +125°C	13.5	12.5	6.5
NEW	AMDLA1306S	0.1 - 100	3.8 - 60.0	0.25 - 161	29.0	1.8	-55°C to +155°C	13.5	12.6	6.5
NEW	AMPLA1707S	0.45 - 100	5.3 - 62.0	0.96 - 118	52.0	2.0	-55°C to +125°C	17.6	16.9	7.0
NEW	AMDLA1707S	0.47 - 82.0	6.5 - 60.0	0.9 - 83.0	46.0	1.3	-55°C to +155°C	17.8	16.9	6.7
NEW	AMDLA2213S	1.5 - 100	7.5 - 48.0	1.15 - 40.0	48.0	1.2	-55°C to +155°C	23.5	22.0	13.0
	Molded Stacked									
NEW	AMSLA-7050	0.072 - 0.150	30.0 - 45.0	0.35	-	-	-40°C to +125°C	7.0	7.0	5.0
NEW	AMSLA-1050	0.085 - 0.220	50.0	0.42	-	-	-40°C to +125°C	10.2	7.0	5.0
NEW	AMSLA-1070	0.150 - 0.310	32.0 - 70.0	0.41 - 0.48	-	-	-40°C to +125°C	10.4	8.0	7.0
NEW	AMSLA-1280	0.220 - 0.230	50.0	0.31	-	-	-40°C to +125°C	12.0	8.0	7.0
NEW	AMSLA-1380	0.210 - 0.440	50.0	0.35	-	-	-40°C to +125°C	13.0	13.0	8.0

RESIN SHIELDED INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-Cigarettes
- Digital Cameras
- Robotic Vacuums
- Cell phones
- Tablets

SQUARE RESIN SHIELDED
ROUND RESIN SHIELDED
8 SIDED RESIN SHIELDED

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Square Resin Shielded									
ASPI-U201610	0.12 - 4.7	1.25 - 5.6	15.0 - 288	2.6	60.0	-40°C to +125°C	2.0	1.6	1.0
ASPI-U252010	0.16 - 4.7	1.4 - 5.0	20.0 - 240	3.1	50.0	-40°C to +125°C	2.5	2.0	1.0
ASPI-M3015	0.47 - 10.0	1.5 - 5.0	27.0 - 270	3.8	42.0	-40°C to +125°C	3.0	3.0	1.5
ASPI-0425	1.0 - 220	0.2 - 3.0	12.0 - 2300	3.0	12.0	-25°C to +120°C	4.0	4.0	2.5
ASPI-0615FS	0.5 - 47.0	0.8 - 5.2	9.0 - 370	4.1	12.0	-25°C to +120°C	6.0	6.0	2.0
ASPI-0628	0.9 - 100	0.66 - 4.6	13.0 - 600	4.6	13.0	-25°C to +120°C	6.0	6.0	2.8
Round Resin Shielded									
ASPI-0645	1.0 - 220	0.5 - 6.5	10.0 - 920	6.5	10.0	-25°C to +120°C	6.0	6.0	4.5
ASPI-0840	0.5 - 220	0.75 - 8.0	6.0 - 630	7.9	7.0	-40°C to +85°C	8.0	8.0	4.0
ASPI-0310FS	1.0 - 47.0	0.28 - 2.3	50.0 - 1600	2.3	50.0	-25°C to +120°C	3.0	3.0	1.0
ASPI-0410FS	1.0 - 22.0	0.36 - 1.8	100 - 870	1.8	100	-40°C to +85°C	4.0	4.0	1.0
ASPI-0412FS	0.82 - 100	0.25 - 1.65	65.0 - 2873	1.7	65.0	-25°C to +125°C	4.0	4.0	1.2

RESIN SHIELDED INDUCTORS

APPLICATIONS

HEALTHCARE

- Wearable medical
- Monitoring equipment (blood sugar – glucose, thermometers, finger pulse/oximeters)

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

SQUARE RESIN SHIELDED
ROUND RESIN SHIELDED
8 SIDED RESIN SHIELDED

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A)	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
				@ 1µH			L	W	H
ASPI-0520	1.0 - 33.0	0.9 - 3.6	21.0 - 430	3.6	21.0	-25°C to +120°C	5.0	5.0	2.0
ASPI-5040S	1.5 - 47.0	0.9 - 3.6	24.0 - 372	3.6	24.0	-25°C to +120°C	5.0	5.0	4.0
ASPI-6045S	0.8 - 330	0.57 - 5.9	8.0 - 1700	5.1	14.0	-40°C to +125°C	6.0	6.0	4.5
ASPI-2010HC	0.24 - 10.0	0.65 - 3.0	40.0 - 826	2.0	90.0	-40°C to +125°C	2.0	1.6	1.0
ASPI-2010	0.47 - 6.8	0.58 - 2.6	59.0 - 816	1.6	114	-40°C to +125°C	2.0	1.6	1.0
ASPI-2012	0.1 - 33.0	0.33 - 2.75	31.0 - 160	1.7	88.0	-40°C to +125°C	2.0	2.0	1.2
ASPI-2410	0.68 - 22.0	0.4 - 2.5	60.0 - 1470	1.9	70.0	-25°C to +120°C	2.4	2.4	1.0
ASPI-2510	0.47 - 10.0	0.56 - 2.5	38.0 - 712	1.8	70.0	-25°C to +120°C	2.5	2.0	1.0

RESIN SHIELDED INDUCTORS

APPLICATIONS

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Asset Tracking

IOT

- Industrial IoT
- Wearables
- Portable devices
- Switch mode power supplies (low and high power)
- Bluetooth speakers
- Smart home devices/ control units
- Security Cameras

SQUARE RESIN SHIELDED
ROUND RESIN SHIELDED
8 SIDED RESIN SHIELDED

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A)	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
				@ 1µH			L	W	H
ASPI-2512	0.47 - 10.0	0.59 - 2.15	47.0 - 630	1.7	73.0	-25°C to +120°C	2.5	2.0	1.2
ASPI-M2512	0.24 - 10.0	1.0 - 4.1	23.0 - 480	3.0	48.0	-40°C to +125°C	2.5	2.0	1.2
ASPI-2515	0.47 - 10.0	0.75 - 2.8	35.0 - 445	2.2	49.0	-25°C to +120°C	2.5	2.0	1.2
ASPI-0312FS	1.0 - 47.0	0.25 - 1.5	50.0 - 1450	1.5	50.0	-25°C to +120°C	3.0	3.0	1.2
ASPI-3012S	0.82 - 100	0.17 - 2.22	30.0 - 2860	1.9	40.0	-40°C to +125°C	3.0	3.0	1.2
ASPI-0315FS	1.0 - 100	0.25 - 2.3	28.0 - 2100	2.3	28.0	-25°C to +120°C	3.0	3.0	1.5
ASPI-0315S	1.0 - 680	0.069 - 1.47	46.0 - 1274	1.47	46.0	-40°C to +125°C	3.0	3.0	1.8
ASPI-0418FS	0.82 - 220	0.28 - 4.0	16.0 - 2960	3.7	19.0	-25°C to +120°C	4.0	4.0	1.8
ASPI-4020S	1.0 - 100	0.31 - 2.15	29.0 - 1550	2.2	29.0	-40°C to +125°C	4.0	4.0	2.0
ASPI-4030S	0.91 - 120	0.42 - 4.15	13.0 - 1350	4.2	14.0	-40°C to +125°C	4.0	4.0	3.0
ASPI-8040S	0.82 - 330	0.64 - 6.3	10.0 - 1156	6.3	10.0	-40°C to +125°C	8.0	8.0	4.2

SLEEVE SHIELDED INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-Cigarettes
- Digital Cameras
- Robotic Vacuums
- Cell phones
- Tablets

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

SHIELDED TYPE A WIREWOUND

SHIELDED TYPE B WIREWOUND

TRADITIONAL SHIELDED WIREWOUND

ROUND SHIELDED WIREWOUND

SHIELDED INDUCTOR WITH RESIN SEALING

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Shielded Type A Wirewound									
ASPI-0428S	1.2 - 180	0.22 - 2.56	23.6 - 1540	2.6	23.6	-40°C to +85°C	4.7	4.7	3.0
ASPI-104S	0.56 - 1000	0.32 - 10.0	8.0 - 3250	10.0	8.0	-40°C to +125°C	10.4	10.4	4.0
Shielded Type B Wirewound									
ASPI-2D09	1.2 - 10.0	0.28 - 0.8	97.5 - 537.5	0.8	97.5	-30°C to +100°C	3.2	3.2	1.0
ASPI-2D11	1.5 - 10.0	0.35 - 0.9	68.0 - 400	0.9	68.0	-30°C to +100°C	3.2	3.2	1.2
ASPI-2D14	1.5 - 12.0	0.62 - 1.8	63.0 - 394	1.8	63.0	-30°C to +100°C	3.2	3.2	1.6
ASPI-2D18L	2.2 - 47.0	0.2 - 0.85	41.0 - 660	0.9	41.0	-30°C to +100°C	3.2	3.2	2.0
ASPI-2D18H	1.7 - 15.0	0.7 - 1.85	44.0 - 345	1.9	44.0	-30°C to +100°C	3.2	3.2	2.0

SLEEVE SHIELDED INDUCTORS

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Asset Tracking

WHITE GOODS

- Air conditioners
- Freezers/refrigerators
- Washers/dryers
- Microwave ovens
- Coffee machines

IOT

- Industrial IoT
- Wearables
- Portable devices
- Switch mode power supplies (low and high power)
- Bluetooth speakers
- Smart home devices/ control units
- Security Cameras

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ) @ 1µH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Traditional Shielded Wirewound									
ASPI-0403S	1.0 - 6800	0.04 - 3.0	40.0 - 25000	3.0	40.0	-40°C to +85°C	6.6	4.5	2.9
ASPI-1306S	10.0 - 1000	0.53 - 3.9	40.0 - 2010	3.9	40.0	-40°C to +85°C	18.5	15.2	7.6
ASPI-6045T	9.1 - 680	0.33 - 2.6	56.0 - 3250	5.14	9.85	-40°C to +125°C	6.0	6.0	4.5
Round Shielded Wirewound									
ASPI-0602S	3.0 - 100	0.54 - 3.0	24.0 - 535	3.0	24.0	-40°C to +85°C	6.7	6.7	3.0
Shielded Inductor with Resin Sealing									
ASPI-0704S	2.2 - 1000	0.18 - 5.0	28.0 - 6000	5.0	28.0	-40°C to +125°C	7.3	7.3	4.5
ASPI-1207S	1.0 - 1000	0.7 - 14.0	6.0 - 1500	14.0	6.0	-40°C to +85°C	12.0	12.0	8.0

UNSHIELDED INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

WHITE GOODS

- Air conditioners
- Freezers/refrigerators
- Washers/dryers
- Microwave ovens
- Coffee machines

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Asset Tracking

TRADITIONAL UNSHIELDED WIREWOUND

ROUND UNSHIELDED WIREWOUND INDUCTOR

SQUARE UNSHIELDED WIREWOUND

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 1µH	DCR (mΩ)	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Traditional Unshielded Wirewound									
ASPI-0804T	0.68 - 2200	0.24 - 11.0	8.0 - 8200	9.0	9.0	-40°C to +125°C	13.0	9.4	5.2
ASPI-1306T	2.2 - 1000	0.56 - 15.0	14.0 - 1800	15.0	14.0	-40°C to +85°C	18.5	15.4	7.5
Round Unshielded Wirewound Inductor									
ASPI-0403	1.0 - 68.0	0.37 - 2.56	48.7 - 1117	2.6	48.7	-40°C to +85°C	4.5	4.0	3.2
ASPI-0403H	1.0 - 82.0	0.3 - 3.8	33.0 - 1200	3.8	33.0	-40°C to +125°C	4.5	4.0	3.2
ASPI-0503H	2.2 - 330	0.28 - 3.5	30.0 - 3200	3.5	30.0	-40°C to +125°C	5.8	5.2	3.2
ASPI-0504	4.7 - 1000	0.15 - 3.5	40.0 - 14400	3.5	40.0	-40°C to +85°C	5.8	5.2	4.5
ASPI-0705	10.0 - 470	0.34 - 2.3	70.0 - 1960	2.3	70.0	-40°C to +85°C	7.8	7.0	5.0
ASPI-0706HC	0.18 - 47.0	0.72 - 10.0	3.0 - 470	-	-	-40°C to +85°C	9.1	6.1	4.7
Square Unshielded Wirewound									
AISC-1206H	0.045 - 100	0.045 - 1.0	27.0 - 8450	0.2	150.0	-40°C to +85°C	3.2	1.6	1.8
AISC-2220H	0.12 - 10000	0.05 - 6.0	9.8 - 140000	4.0	27.0	-40°C to +85°C	5.7	5.0	4.7

RF INDUCTORS

RF INDUCTORS

- Air Coil
- Multilayer
- RF Wirewound
- Thin Film

AIR COIL INDUCTORS

APPLICATIONS

AUDIO/VIDEO

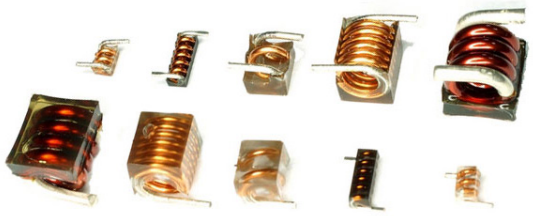
- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

OTHER

- Proximity sensors
- Metal sensors
- Noise suppression for RF power supply
- RF filtering
- Impedance matching



AIR COIL

SERIES	SERIES INDUCTANCE (nH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	SERIES SRF (MHz)	RATED CURRENT (A)	DCR (mΩ)	SRF (MHz)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
					@ 10nH				L	W	H
Air Coil											
AIAC-0805C	3.9 - 68.0	0.3 - 1.2	2.6 - 42.2	1300-3000	0.9	5.4	3000	-40°C to +125°C	2.9	1.8	2.1
AIAC-1008C	6.8 - 120	0.3 - 1.2	4.0 - 63.4	950-3000	1.0	6.0	3000	-40°C to +125°C	3.2	1.9	2.2
AIAC-1512C	2.5 - 18.5	4.0 - 4.8	0.8 - 3.9	2500-3000	4.2	2.7	3000	-40°C to +125°C	3.3	2.5	2.6
AIAC-1606C	5.6 - 7.2	1.6 - 1.6	9.0 - 10.0	6000-6500	1.6	11.5	5200	-40°C to +125°C	4.0	1.4	1.4
AIAC-1812	22.0 - 120	2.2 - 3.5	4.6 - 11.1	1100-3200	3.4	3.8	4000	-40°C to +125°C	5.0	6.4	4.2
AIAC-2712C	17.5 - 43.5	2.5 - 3.5	4.5 - 6.7	1000-2200	4.2	3.8	2400	-40°C to +125°C	6.0	2.5	2.6
AIAC-4125C	90.0 - 538	2.0 - 3.5	9.5 - 42.0	400-1000	-	-	-	-40°C to +125°C	9.0	4.4	4.6

MULTILAYER INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Gaming Consoles
- Virtual Reality Systems
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-Cigarettes
- Digital Cameras
- Robotic Vacuums
- Cell phones
- Tablets

COMMUNICATIONS

- Base stations
- Set top boxes
- Modems
- Servers
- Routers

MEDICAL

- Medical monitoring devices: blood sugar – glucose, thermometers, finger pulse/oximeters

WEARABLES

- Smart watches
- Fitness Trackers
- Smart diving watches
- Exercise wearables

CERAMIC MULTILAYER

SERIES	SERIES INDUCTANCE (nH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	SERIES SRF (MHz)	RATED CURRENT (A)	DCR (mΩ)	SRF (MHz)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
					@ 10nH				L	W	H
Ceramic Multilayer											
AIMC-0201	1.5 - 47.0	0.05 - 0.3	240-3600	1600-11000	0.2	800	5500	-55°C to +125°C	0.6	0.3	0.3
AIMC-0402	1.5 - 120	0.2 - 0.3	100 - 2800	600-6000	0.3	420	3200	-55°C to +125°C	1.0	0.5	0.5
AIMC-0402HQ	1.0 - 15.0	0.4 - 1.0	50.0 - 220	4000-6000	0.5	180	4500	-55°C to +125°C	1.0	0.6	0.5
AIMC-0603	1.0 - 270	0.2 - 0.5	50.0 - 2600	350-10000	0.3	260	3400	-40°C to +85°C	1.6	0.8	0.8
AIMC-0805	2.2 - 220	0.05 - 0.1	100 - 2100	350-6000	0.1	300	2100	-40°C to +85°C	2.0	1.3	0.9

RF WIREWOUND INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Audio equipment
- Amplifiers
- Stereos/speakers
- Monitors

COMMUNICATIONS

- Telecommunication devices
- Wireless LAN
- Cable modems

OTHER

- Antenna matching
- RF matching
- RF transceivers

CERAMIC RF WIREWOUND

SERIES	SERIES INDUCTANCE (nH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	SERIES SRF (MHz)	RATED CURRENT (A) @ 10nH	DCR (mΩ) @ 10nH	SRF (MHz) @ 10nH	OPERATING TEMPERATURE	DIMENSIONS (mm) L	W	H
Ceramic RF Wirewound											
AISC-0402HP	2.0 - 68.0	0.3 - 2.1	38.0 - 950	1840 - 8500	1.3	85.0	4700	-40°C to +125°C	1.0	0.5	0.5
AISC-0402	1.0 - 150	0.4 - 1.4	45.0 - 2900	1200 - 12700	0.5	200	3900	-40°C to +125°C	1.2	0.6	0.7
AISC-0603	3.3 - 560	0.1 - 0.9	59.0 - 8100	650 - 6000	0.6	130	6000	-40°C to +125°C	1.8	1.1	1.0
AISC-0603HC	1.6 - 24.0	1.8 - 2.4	30.0 - 105	2400 - 12500	2.0	71.0	3700	-40°C to +125°C	1.8	1.1	1.0
AISC-0603HP	1.7 - 390	0.2 - 2.1	33.0 - 3800	700 - 8500	1.4	60.0	4800	-40°C to +125°C	1.8	1.1	1.0
AISC-0805HQ	2.5 - 51.0	1.0 - 1.6	20.0 - 120	1400 - 6000	1.6	60.0	3000	-40°C to +125°C	2.3	1.7	1.5
AISC-0805	2.2 - 1000	0.2 - 0.6	80.0 - 2500	200 - 6000	0.6	170	4000	-40°C to +125°C	2.3	1.7	1.6
AISC-1008HQ	3.0 - 100	1.0 - 1.6	40.0 - 160	820 - 8100	1.3	80.0	3600	-40°C to +125°C	2.6	2.1	1.7
AISC-1008	4.7 - 8200	0.2 - 1.0	80.0 - 10700	30.0 - 6000	1.0	80.0	4100	-40°C to +125°C	2.9	2.8	2.3
AISC-1206	3.3 - 1200	0.3 - 1.0	70.0 - 3200	380 - 6200	1.0	90.0	4000	-40°C to +125°C	3.6	2.2	1.5
AISC-1210	3.9 - 8600	0.2 - 1.0	50.0 - 9000	40.0 - 6000	1.0	80.0	4000	-40°C to +125°C	3.7	3.0	2.7

RF WIREWOUND INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Audio equipment
- Amplifiers
- Stereos/speakers
- Monitors

COMMUNICATIONS

- Telecommunication devices
- Wireless LAN
- Cable modems

OTHER

- Antenna matching
- RF matching
- RF transceivers

FERRITE RF WIREWOUND

SERIES	SERIES INDUCTANCE (nH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	SERIES SRF (MHz)	RATED CURRENT (A)	DCR (mΩ)	SRF (MHz)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
					@ 10nH				L	W	H
Ferrite RF Wirewound											
AISC-0402F	18.0 - 200	0.39 - 1.4	46.0 - 470	800 - 3000	-	-	-	-40°C to +85°C	1.1	0.6	0.6
AISC-0603F	47.0 - 22000	0.07 - 1.2	60.0 - 11400	20.0 - 2350	0.3	940	410	-40°C to +85°C	1.6	1.0	1.0
AISC-0805F	270 - 68000	0.04 - 0.35	600 - 17500	11.0 - 550	0.2	1200	63.0	-40°C to +125°C	2.3	1.7	1.6
AISC-1008F	330 - 10000	0.3 - 0.7	170 - 3300	40.0 - 600	0.4	1800	270	-40°C to +125°C	2.9	2.8	2.3
AISC-1210HS	2200 - 33000	0.22 - 0.8	500 - 5000	20.0 - 150	0.7	450	200	-40°C to +85°C	3.2	2.5	1.3

THIN FILM INDUCTORS

APPLICATIONS

CONSUMER ELECTRONICS

- Notebooks/laptops
- Printer/copy/fax machines
- Digital cameras
- Headphones
- Tablets

COMMUNICATIONS

- Wireless LAN
- Bluetooth
- GPS
- Cell phones
- Set top boxes
- RF blocking
- RF filtering
- EMI filtering

OTHER

- Power supplies
- Voltage-controlled oscillators

THIN FILM

SERIES	SERIES INDUCTANCE (nH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	SERIES SRF (MHz)	RATED CURRENT (A)	DCR (mΩ)	SRF (MHz)	OPERATING TEMPERATURE	DIMENSIONS (mm)		
					@ 10nH				L	W	H
Thin Film											
ATFC-0201	0.1 - 10.0	0.08 - 0.4	200-3500	2000-9000	0.1	3500	2000	-25°C to +85°C	0.6	0.3	0.23
ATFC-0201HQ	0.1 - 4.0	0.35 - 0.85	50.0 - 400	6000	-	-	-	-40°C to +85°C	0.6	0.3	0.23
ATFC-0402	0.2 - 33.0	0.075 - 0.8	100 - 4500	2500-14000	0.2	1350	4500	-40°C to +85°C	1.0	0.5	0.32
ATFC-0402HQ	1.3 - 4.7	0.33 - 0.73	120 - 500	7000	-	-	-	-40°C to +85°C	1.0	0.5	0.32

LEADED POWER INDUCTORS

LEADED POWER INDUCTORS

- Axial
- Drum Core
- Toroid

AXIAL INDUCTORS

APPLICATIONS

AUDIO

- Amplifiers
- Speakers
- Audio equipment

CONSUMER ELECTRONICS

- Wearables and other small personal devices

COMMUNICATIONS

- Telecommunication devices

IOT

- Smart lighting
- Smart metering
- Smart appliances

WHITE GOODS

- Small appliances
- Microwaves
- Toaster ovens
- Coffee machines

OTHER

- Low power switch mode power supplies
- DC/DC converters

CONFORMAL COATED AXIAL

EPOXY COATED AXIAL

MOLDED AXIAL

UL SHRINK WRAP AXIAL

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (Ω)	RATED CURRENT (A) @ 100µH	DCR (Ω) @ 100µH	OPERATING TEMPERATURE	DIMENSIONS (mm) DIAMETER	DIMENSIONS (mm) H
Conformal Coated Axial								
AICC-00	0.22 - 220	0.04 - 0.40	0.40 - 20.0	0.04	12000	-25°C to +105°C	2.5	4.1
AICC-01	0.22 - 1000	0.04 - 0.40	0.40 - 33.0	0.09	7000	-25°C to +105°C	3.1	7.1
AICC-02	0.27 - 1000	0.06 - 1.11	0.08 - 26.0	0.17	3800	-25°C to +105°C	2.8	6.2
AICC-03	0.22 - 1000	0.10 - 0.98	0.17 - 14.0	0.28	1800	-25°C to +105°C	3.3	9.5
AICC-04	0.1 - 1000	0.01 - 1.38	0.08 - 27.4	0.08	4100	-25°C to +105°C	3.0	7.6
Epoxy Coated Axial								
AIAP-01	1.0 - 10000	0.05 - 3.30	0.02 - 85.0	0.55	670	-40°C to +105°C	3.3	9.1
Molded Axial								
AIAM-01	0.022 - 1000	0.03 - 2.40	0.03 - 72.0	0.08	8000	-55°C to +105°C	2.4	6.4
AIAS-03	100 - 100000	0.01 - 0.12	3.12 - 678	0.12	3120	-55°C to +125°C	4.1	10.4
UL Shrink Wrap Axial								
AIAP-02	3.9 - 18000	0.09 - 7.30	0.02 - 48.3	1.20	208	-40°C to +85°C	6.4	14.0
AIAP-05	3.9 - 18000	0.04 - 1.28	0.02 - 48.3	0.63	208	-55°C to +130°C	6.4	17.8
AIAP-03	3.9-120000	0.07-15.50	0.01-71.7	2.79	90	-55°C to +125°C	11.4	22.9

DRUM CORE INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Stereos
- Amplifiers
- Projectors

CONSUMER ELECTRONICS

- Drones
- E-cigarettes
- Robotic vacuums

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine power tools
- Solar inverters
- Drones
- Heavy construction equipment
- Commercial/industrial lighting

WHITE GOODS

- Air conditioners
- Freezers/refrigerators
- Washers/Dryers
- Microwave ovens
- Coffee machines

UNSHIELDED WIREWOUND DRUM CORE

UNSHIELDED WIREWOUND DRUM CORE 4 PIN

UL SHRINK WRAP DRUM CORE

UL SHRINK WRAP DRUM CORE 4 PIN

MOLDED DRUM CORE

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (Ω)	RATED CURRENT (A) @ 100µH	DCR (Ω) @ 100µH	OPERATING TEMPERATURE	DIMENSIONS (mm) DIAMETER	DIMENSIONS (mm) H
Unshielded Wirewound Drum Core								
AIUR-07	10.0 - 1000	0.10 - 1.05	0.1 - 6.3	0.39	660	-55°C to +125°C	6.0	4.6
AIUR-10	5.6 - 10000	0.10 - 2.45	0.08 - 25.0	0.77	440	-55°C to +125°C	8.0	7.5
AIUR-15	22.0 - 1000	1.0 - 5.7	0.03 - 0.71	3.20	82.0	-25°C to +85°C	18.0	20.0
Unshielded Wirewound Drum Core 4 pin								
AIUR-09	10.0 - 1000	0.36 - 3.6	0.044 - 3.3	1.30	360	-55°C to +125°C	10.0	6.0
UL Shrink Wrap Drum Core								
AIUR-16	3.9 - 33000	0.03 - 1.3	0.02 - 100	0.49	270	-25°C to +85°C	7.0	9.5
AIUR-01	100 - 15000	0.02 - 0.2	2.0 - 80.0	0.20	2000	-25°C to +85°C	8.5	7.5
AIUR-05	2.2 - 1500	0.15 - 3.0	0.012 - 3.5	0.59	230	-25°C to +85°C	8.5	9.0
AIUR-04	100 - 27000	0.30 - 0.20	2.0 - 80.0	0.20	2000	-25°C to +85°C	8.5	11.2
AIUR-02H	1.0 - 2200	0.10 - 3.5	0.021 - 3.0	0.72	210	-25°C to +85°C	8.5	12.0
AIUR-03	1.0 - 1000	0.22 - 3.5	0.013 - 2.9	0.72	280	-25°C to +85°C	9.0	12.0
AIUR-11	3.9-68000	0.04 - 1.6	0.022 - 115	1.00	180	-40°C to +85°C	9.5	11.4

DRUM CORE INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- Speakers
- Televisions
- Stereos
- Amplifiers
- Projectors

WHITE GOODS

- Air conditioners
- Freezers/refrigerators
- Washers/dryers
- Microwave ovens
- Coffee machines

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED Drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine/power tools
- Solar inverters
- Heavy construction equipment
- Commercial/industrial lighting

CONSUMER ELECTRONICS

- Drones
- E-cigarettes
- Robotic vacuums

UNSHIELDED WIREWOUND DRUM CORE

UNSHIELDED WIREWOUND DRUM CORE 4 PIN

UL SHRINK WRAP DRUM CORE

UL SHRINK WRAP DRUM CORE 4 PIN

MOLDED DRUM CORE

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (Ω)	RATED CURRENT (A) @ 100µH	DCR (Ω) @ 100µH	OPERATING TEMPERATURE	DIMENSIONS (mm) DIAMETER	DIMENSIONS (mm) H
UL Shrink Wrap Drum Core								
AIUR-06	3.9 - 15000	0.10 - 6.5	0.016 - 20.5	2.10	108	-25°C to +85°C	13.0	18.0
AIRD-01	1.0 - 680	0.80 - 9.0	0.003 - 0.7	2.80	95.0	-25°C to +85°C	16.5	21.0
AIRD-02	1.0 - 2200	0.80 - 11.4	0.003 - 1.54	4.00	80.0	-25°C to +85°C	21.0	21.0
AIRD-06	1.0 - 2200	0.80 - 11.4	0.003 - 1.54	4.00	80.0	-25°C to +85°C	21.0	21.0
AIRD-03	1.0 - 19000	0.50 - 21.0	0.003 - 9.0	9.00	34.0	-25°C to +85°C	28.0	21.0
UL Shrink Wrap Drum Core 4 pin								
AIUR-08	10.0 - 1000	0.53 - 5.3	0.023 - 1.7	1.70	160	-25°C to +85°C	11.0	11.0
Molded Drum Core								
AISR-875	10.0 - 10000	0.08 - 2.9	0.05 - 33.0	0.89	280	-55°C to +125°C	7.8	7.5
AISR-01	1000 - 120000	0.01 - 0.09	3.4 - 97.0	N/A	N/A	-25°C to +85°C	10.5	10.5
AISR-04	10.0 - 1000	0.01 - 0.0039	0.02 - 1.5	0.00	190	-25°C to +85°C	10.5	10.5

TOROID INDUCTORS

APPLICATIONS

AUDIO/VIDEO

- High-end audio equipment
- Wired headphones
- Digital mixing boards
- Sound board mixers
- Televisions

WHITE GOODS

- Air conditioners
- Freezers/refrigerators
- Washers/dryers
- Microwave ovens
- Coffee machines
- Robotic vacuums

MEDICAL

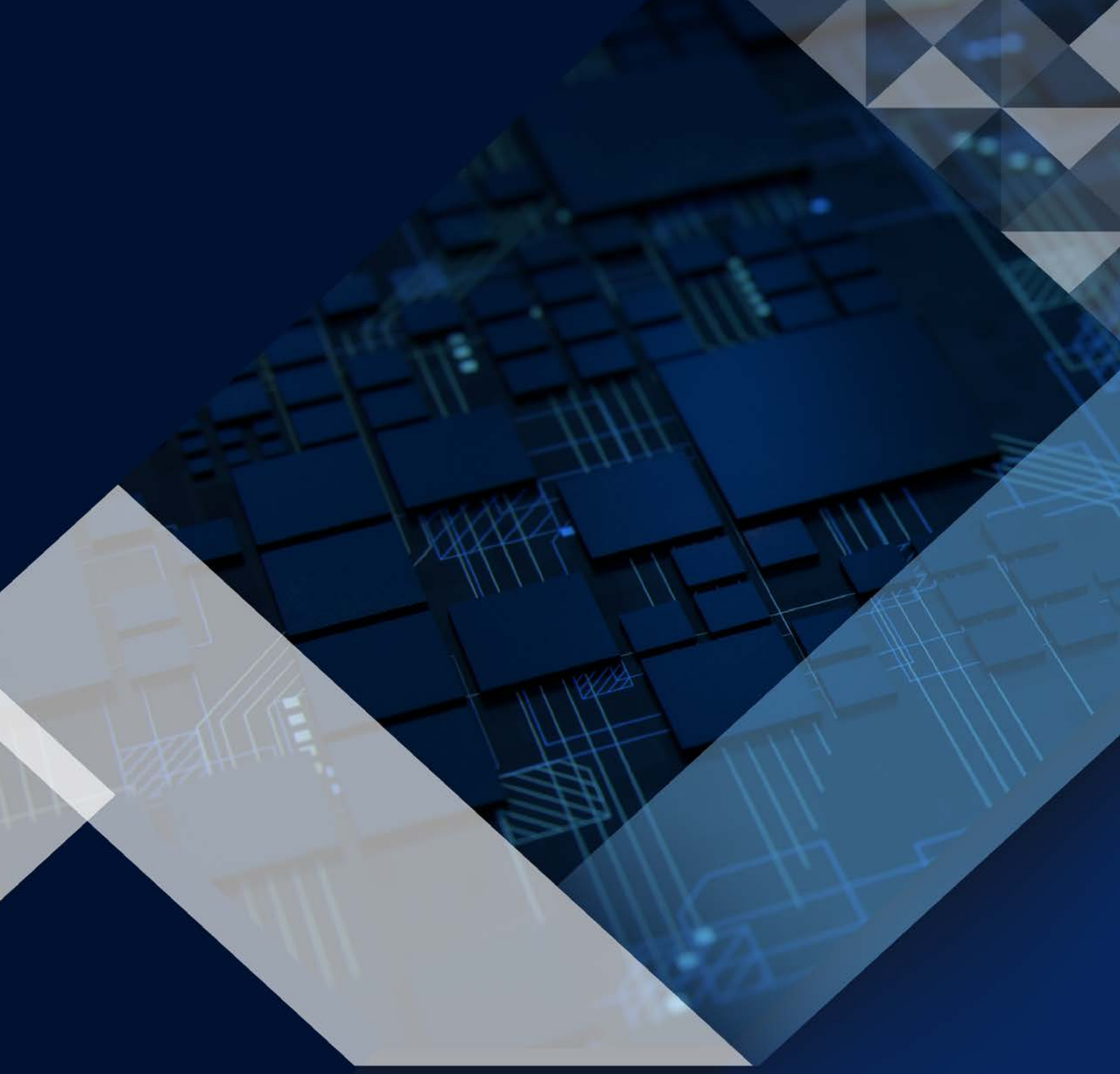
- Respiratory ventilators
- Surgical machines
- Electric wheelchairs
- Exercise equipment
- Equipment sterilizer
- EKG machines
- Medical LED lighting
- Rotary mixing machines
- Vacuum pumps
- CT scanners
- X-ray machines
- Electric beds

INDUSTRIAL

- Agricultural/utility/resource monitoring (smart meters)
- LED Drivers
- Manufacturing line robotics
- Fuel/oil/water pumps
- Motor controllers
- Machine/power tools
- Solar inverters
- Heavy construction equipment
- Commercial/industrial lighting

TOROID

SERIES	SERIES INDUCTANCE (µH)	SERIES CURRENT RATING (A)	SERIES DCR (mΩ)	RATED CURRENT (A) @ 100µH	DCR (mΩ) @ 100µH	OPERATING TEMPERATURE	DIMENSIONS (mm) DIAMETER	DIMENSIONS (mm) H
Toroid								
ATCA-01	0.02 - 220	1.0 - 3.0	21.0 - 190	2.00	81.0	-40°C to +105°C	18.0	11.5
ATCA-02	22.0 - 470	1.0 - 5.0	14.0 - 286	2.50	57.0	-40°C to +105°C	22.0	12.5
ATCA-03	25.0 - 230	1.0 - 5.0	16.0 - 159	3.50	46.0	-40°C to +105°C	24.0	11.5
ATCA-04	50.0 - 960	1.0 - 5.0	22.0 - 438	5.00	33.0	-40°C to +105°C	27.0	13.5
ATCA-05	90.0 - 1800	1.0 - 5.0	34.0 - 680	4.20	39.0	-40°C to +105°C	30.0	17.0
ATCA-06	82.0 - 1300	1.0 - 5.0	33.0 - 585	4.00	42.0	-40°C to +105°C	32.0	16.0
ATCA-07	30.0 - 850	2.0 - 10.0	9.0 - 211	5.00	36.0	-40°C to +105°C	36.0	19.5
ATCA-08	75.0 - 680	5.0 - 10.0	14.0 - 105	8.50	22.0	-40°C to +105°C	36.0	19.5



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