COMPONENT BASICS

INNOVATED IN CANADA

CB-VAC Power

SMD Power Inductors

About Component Basics | CBVAC Power

Component Basics is a Canadian, global manufacturer of specialised electronic components supporting modern power and energy-efficient designs. Our portfolio spans HVDC switching, circuit protection, thermal management, and advanced magnetics, serving industrial, computing, EV, energy storage, and infrastructure markets.

We operate through three focused product brands:

- **CBVAC** – HVDC contactors and switching solutions
- **CBVAC Protect** – circuit protection solutions including fuses
- **CBVAC Power** – power magnetics and thermal-related components

This catalogue highlights the CBVAC Power magnetics portfolio, with a focus on SMD power inductors designed for DC-DC converters and power management applications.

Magnetics Portfolio Overview

Our power magnetics range covers compact, high-current, shielded, toroidal, and standard drum-core inductors, supporting a wide span of footprints, heights, inductance values, and current ratings. The portfolio is intended to simplify design-in across both cost-sensitive and performance-critical applications.

What engineers value

- Broad standard portfolio with practical selection ranges
- High-current and low-DCR designs for efficient power stages
- Stable inductance performance under DC bias
- Cross-reference support to commonly used industry parts
- Custom and modified solutions available with quick turnaround

How we support designs

We work closely with hardware and power-electronics teams to support new designs, alternates, and long-term supply continuity. Datasheets, samples, and application guidance are available to support evaluation and qualification.

CBVAC Power – Practical magnetics for real-world power designs.

Product Families – Power SMD Inductors

"MORE OPTIONS & CUSTOMIZED SOLUTIONS AVAILABLE WITH QUICK TURNAROUND"

CBRH series – shielded SMD power inductors

CBRH series are shielded SMD power inductors designed for DC-DC converters and power management applications, offering multiple footprints, heights, and current ratings.

【 KEY FEATURES 】

- Shielded construction for low EMI
- Multiple footprints
- Wide inductance and current coverage
- Optimized for DC-DC power designs
- Surface-mount package

【 TYPICAL APPLICATIONS 】

- **DC-DC converters**
- **Point-of-load regulation**
- **Notebooks & displays**
- **Industrial power modules**

【 CBRH Series – Quick Selection Guide 】

Series	Footprint	Height	Inductance Range	Current Class
CBRH8D28	8×8	3.0 mm	1–100 µH	Medium
CBRH8D43	8×8	4.5 mm	0.68–100 µH	Med–High
CBRH103R	10×10	3.0 mm	0.8–150 µH	High
CBRH104R	10×10	4.0 mm	1.3–330 µH	Med–High
CBRH105R	10×10	5.0 mm	10–1000 µH	Low–Med
CBRH124	12×12	4.5 mm	3.9–330 µH	Medium
CBRH125	12×12	6.0 mm	1.3–1000 µH	Medium
CBRH127	12×12	8.0 mm	1.2–1000 µH	High

【 NOTES 】

- Electrical ratings are series-dependent
- Detailed datasheets, samples, and cross-references available on request

CBD Series – Compact SMD Power Inductors

Compact, reliable inductors for low-power DC-DC designs

CBD series SMD power inductors are designed for space-constrained, low-power applications such as portable electronics, consumer devices, and small DC-DC converters. The series offers multiple compact footprints with stable inductance performance and cost-effective construction.

【 KEY FEATURES 】

- Compact SMD construction
- Multiple small footprints (4×4 mm to 7×7 mm)
- Wide inductance coverage for low-power designs
- Stable inductance under DC bias
- Surface-mount compatible, RoHS compliant

【 TYPICAL APPLICATIONS 】

- Small DC-DC converters
- Portable and handheld electronics
- Consumer devices
- LCD drivers and signal power rails

【 CBD Series – Quick Selection Guide 】

Series	Footprint (mm)	Height (mm)	Inductance Range (µH)	Current Class
CBD4011	4.4 × 4.4	5.8	2.2 – 47	Low
CBD4006	6.3 × 6.3	5.8	2.2 – 47	Low
CBD4008	~6.3 × 5.8	5.8	3.3 – 100	Low
CBD4013	~6.0 × 4.0	5.8	3.3 – 100	Low
CBD5011	6.0 × 6.0	7.4	3.3 – 100	Low
CBD5013	~6.0 × 6.0	7.4	3.3 – 47	Low
CBD73F	7.4 × 7.4	—	1 – 100	Low–Medium
CBD75F	~7.4 × 7.4	5.1	1 – 470	Low–Medium

【 NOTES 】

- Electrical ratings are series-dependent
- Detailed datasheets, samples, and cross-references available on request

CBRD Series – Radial Choke Inductors

Reliable through-hole inductors for filtering and power applications

CBRD series radial choke inductors are designed for general-purpose filtering and energy storage in power supply, industrial, and consumer electronics. The radial leaded construction provides mechanical stability and ease of PCB assembly for through-hole designs.

【 KEY FEATURES 】

- Radial leaded (through-hole) construction
- Wide inductance range
- Stable performance under DC bias
- Suitable for power and EMI filtering applications
- Cost-effective and robust design

【 TYPICAL APPLICATIONS 】

- Power supplies and adapters
- EMI and noise filtering
- Consumer electronics
- Industrial and automotive electronics

【 CBRD Series – Quick Selection Guide 】

Series	Construction	Inductance Range (µH)	Max Current	Mounting
CBRD06082H	Radial choke	1 – 1000	Up to 3.0 A	Through-hole
CBRD08102H	Radial choke	1 – 1000	Up to 4.5 A	Through-hole

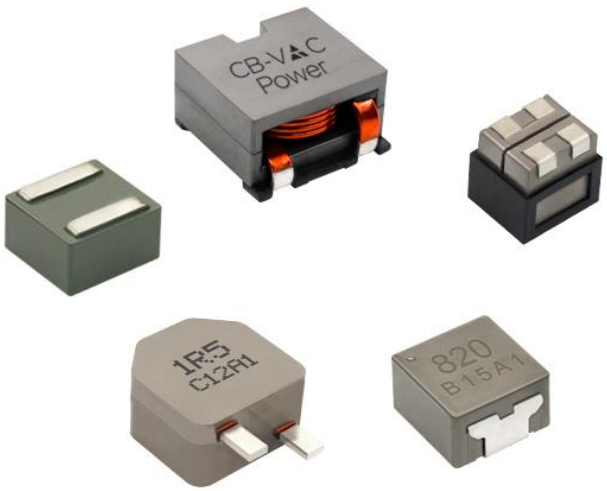
【 NOTES 】

- Electrical ratings vary by inductance value
- Detailed datasheets, samples, and cross-references available on request

CBTX Series – SMD Toroidal Power Inductors

High ripple current handling with stable inductance performance

CBTX series SMD toroidal power inductors are designed for power supply and DC-DC converter applications requiring high ripple current capability, low DCR, and stable inductance under load. Toroidal core construction provides efficient magnetic performance and reduced core losses compared to standard drum-core inductors.



【 KEY FEATURES 】

- Toroidal core construction
- High ripple current capability
- Low DC resistance for improved efficiency
- Stable inductance under DC bias
- Surface-mount compatible

【 TYPICAL APPLICATIONS 】

- DC-DC converters
- Power supplies and adapters
- Output ripple current filtering
- Computing and consumer electronics

【 CBTX Series – Quick Selection Guide 】

Series	Construction	Inductance Range (µH)	Max Current	Mounting
CBTX-4P	Toroidal	0.47 – 300	Up to ~7.9 A	SMD
CBTX-2P	Toroidal	0.47 – 300	Up to ~5.9 A	SMD
CBTX0718	Toroidal	1.0 – 47	Up to ~2.1 A	SMD

【 NOTES 】

- Electrical ratings are series-dependent
- Detailed datasheets, samples, and cross-references available on request

CBHP Series – High-Current SMD Power Inductors

Compact, low-profile inductors for high-current DC-DC power designs

CBHP series SMD power inductors are designed for high-current DC-DC converters where low DCR, high efficiency, and compact size are critical. The series offers multiple footprints and low-profile heights to support modern computing, server, and battery-powered applications.

【 KEY FEATURES 】

- High current capability
- Low DC resistance for high efficiency
- Compact and low-profile SMD packages
- Stable inductance under DC bias
- Suitable for high-density power designs

【 TYPICAL APPLICATIONS 】

- CPU, GPU, FPGA power rails
- Servers and data-center power
- High-current DC-DC converters
- Battery-powered and industrial equipment

【 CBHP Series – Quick Selection Guide 】

Series	Footprint (mm)	Height (mm)	Inductance Range (µH)	Current Class
CBHP1050	~11.5 × 10.2	5	0.36 – 10	Very High
CBHP1040	11.5 × 11.5	4	0.36 – 10	Very High
CBHP0750LD	7.3 × 7.3	5	0.22 – 10	High
CBHP0735	7.3 × 7.3	3.5	0.10 – 10	High
CBHP0730LD	7.3 × 7.3	3	0.22 – 10	High
CBHP0724	7.3 × 7.3	2.4	0.10 – 10	High
CBHP0718	—	1.8	0.10 – 4.7	High

【 NOTES 】

- Electrical ratings are inductance-dependent
- Detailed datasheets, samples, and cross-references available on request

CBECEP Series – High-Current SMD Power Inductors

CBECEP series are shielded, low-DCR SMD power inductors designed for high-current DC-DC converters in computing, server, and power supply applications.

【 KEY FEATURES 】

- High current capability
- Low DC resistance (flat wire construction)
- Shielded structure for reduced EMI
- Stable inductance under DC bias
- Surface-mount package

【 TYPICAL APPLICATIONS 】

- Notebook and desktop power
- Server and telecom power rails
- Battery-powered equipment
- High-efficiency DC-DC converters

【 CBECEP Series – Quick Selection Guide 】

Series	Footprint (mm)	Height (mm)	Inductance Range (µH)	Current Class	Status
CBECEP134H	13.9 × 13.9	5	0.30 – 6.0	Very High	Detailed
CBECEP125U	12.9 × 12.9	5.7	0.35 – 5.6	Very High	Typical
CBECEP125H	12.9 × 12.9	5.7	1.0 – 7.2	Very High	Typical
CBECEP105H	10.4 × 10.4	5.6	0.15 – 3.0	High	Typical
CBECEP105S	10.4 × 10.4	5.6	0.22 – 5.0	High	Typical
CBECEP105L	10.4 × 10.4	5.6	0.36 – 8.8	Very High	Typical
CBECEP104S	10.4 × 10.4	4.5	0.22 – 2.5	Medium	Typical
CBECEP104L	10.4 × 10.4	4.5	0.36 – 4.3	High	Typical

【 NOTES 】

- Electrical ratings are series-dependent
- Detailed datasheets, samples, and cross-references available on request

CBSLF Series – Shielded SMD Power Inductors

CBSLF series are shielded SMD power inductors offering wide inductance ranges and stable performance under DC bias, suitable for DC-DC converters in computing, storage, and portable electronics

【 KEY FEATURES 】

- Shielded construction for reduced EMI
- Wide inductance coverage (up to 1500 µH)
- Low DC resistance
- Stable inductance under load
- Surface-mount package

【 TYPICAL APPLICATIONS 】

- DC-DC converters
- Notebooks and storage devices
- Portable electronics
- Power management circuits

【 CBSLF Series – Quick Selection Guide 】

Series	Footprint (mm)	Height (mm)	Inductance Range (µH)	Current Class	Status
CBSLF12575	12.5 × 12.5	7.5	1.2 – 220	High	Detailed
CBSLF12565	12.5 × 12.5	6.5	2 – 220	High	Typical
CBSLF12555	12.5 × 12.5	5.5	6 – 1500	Medium	Typical
CBSLF10145	10.1 × 10.1	4.5	3.3 – 1500	Medium	Typical
CBSLF7045	7.0 × 7.0	4.5	3.3 – 1000	Medium	Typical
CBSLF7032	7.0 × 7.0	3.2	3.3 – 1000	Medium	Typical
CBSLF7028	7.0 × 7.0	2.8	3.3 – 47	Low	Typical
CBSLF6028	6.0 × 6.0	2.8	4.7 – 100	Low	Typical
CBSLF6025	6.0 × 6.0	2.5	4.7 – 100	Low	Typical

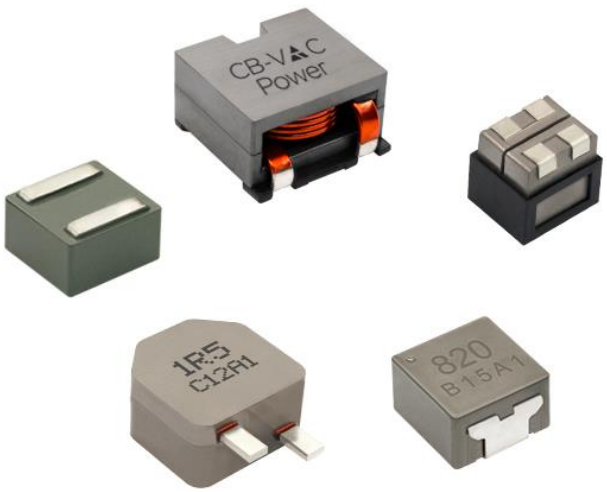
【 NOTES 】

- Electrical ratings vary by inductance value
- Detailed datasheets, samples, and cross-references available on request

CBR Series – SMD Power Inductors (Standard Drum Core)

Cost-effective SMD inductors for general DC-DC power applications

CBR series SMD power inductors use standard drum-core construction and are designed for general-purpose DC-DC converters and power management circuits. The series offers a wide range of footprints, heights, and inductance values, making it suitable for portable, consumer, and industrial electronics.



【 KEY FEATURES 】

- Standard drum-core construction
- Wide range of compact SMD packages
- Broad inductance coverage
- Cost-effective solution for general power designs
- Surface-mount compatible

【 TYPICAL APPLICATIONS 】

- DC-DC converters
- Portable and consumer electronics
- Computing and communication equipment
- General power management circuits

【 CBR Series – Quick Selection Guide 】

Series	Footprint (mm)	Height (mm)	Inductance Range (µH)	Current Class
CBR126C2	12.8 × 12.8	6.8	1.7 – 680	High
CBR106C2	10.4 × 10.4	6.8	1.2 – 330	High
CBR104C2	10.4 × 10.4	4.8	1.1 – 120	Medium
CBR7014C	—	—	—	—
CBR63CB	6.3 × 6.3	3.5	2 – 560	Low–Medium
CBR63LCB	6.3 × 6.3	3	1 – 150	Low–Medium
CBR62CB	6.3 × 6.3	2.5	1 – 100	Low
CBR62LCB	6.3 × 6.3	2	1 – 47	Low

【 NOTES 】

- Electrical ratings are series-dependent
- Detailed datasheets, samples, and cross-references available on request

Contact Us

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