

CEO 인사말

“세계를 무대로 새로운 지평을 여는 삼형전자”

앞선 기술력과 추진력으로 새로운 길을 열어갑니다.

사업 파트너와 상호 신뢰를 기반으로 공동의 발전을 추구하는
글로벌 기업으로 거듭나겠습니다.

저희 삼형전자는 1989년 창립한 이래 끊임없는 노력을 경주하여
LINE FILTER / TRANS 등 자성체 분야에서 독보적 기술력과 생산력을
확보하였으며, 당사의 모든 임직원들과 함께 고도화된 기술 개발 /
생산성 향상을 통한 고객만족을 위해 매진하고 있습니다.

고객이 있어야 당사도 존속할 수 있다는 명제를 잊지 않고 최상의
QUALITY, COST, DELIVERY를 선사할 수 있도록 노력하겠습니다,
고객과 함께 세계로 도약하는 글로벌 기업으로 거듭나겠습니다.

삼형전자(주)  대표 올림

연혁

- 2021 ▪ 본사 사옥 신축 및
▪ EMI 측정시스템 구축
- 2019 ▪ UL 인증 II (Class F)
- 2018 ▪ 신뢰성 시험 장비 구축
▪ 중국 생산라인 신축
- 2015 ▪ 서울 삼형전자 본사 사옥 개축 및 품질검사실 증축공사
- 2013 ▪ 임가공 업체 중국 단동 삼형전자 생산라인 설립
- 2010 ▪ 코아 코팅 임가공 업체 부천 오정 월드코팅 설립
▪ ISO 9001:2009 / 14001:2004 인증획득
▪ TRANSFORMER CLASS B UL 인증획득
▪ 기업부설연구소 설립
- 2005 ▪ 중국 문등 AMP / TRANS 생산라인 설립
▪ 중국 문등 코아 코팅 라인 설립
▪ 전자식 안정기 P.C.B 라인 설립
- 2004 ▪ 중국 문등 삼형전자유한회사 설립
- 2002 ▪ 삼형전자, 삼형전자 주식회사 합병
▪ 코아 코팅 임가공 업체 부천 삼정 S.Y.C 설립
- 2001 ▪ 중국 문등 무궁화전자유한공사 임가공 계약 체결
▪ 수입코아 (MICROMETAL) 국산코아(COMPOSITE CORE) 대체개발 성공
- 2000 ▪ 부천 내동 코아 코팅 반자동화설비 가동
- 1995 ▪ 산학공동연구 (단국대, 고효율 NOISE FILTER)
- 1993 ▪ 부천 내동 공장 설립
- 1989 ▪ 삼형전자 설립



The key point of success of the business

탄탄한 생산라인을 주축으로 철저한 납기일을 준수하여 차별화된 품질의 제품으로
고객의 니즈를 만족시키겠습니다.



FEATURES

- PCB mounting type for miniature general purpose
- Require small space of PCB
- Excellent frequency characteristics
- Compact, and provide a large inductance
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

- Digital equipments
- For use in miniature equipments
- Switching power sources and switching power supply adapters
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC10035030**	1.5	300	3.0	100
SHC10045010**	2.5	300	1.0	40
SHC10050005**	3.0	300	0.5	30
SHC10050003**	4.0	300	0.03	25
SHC10060003**	5.0	300	0.03	25

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 105°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

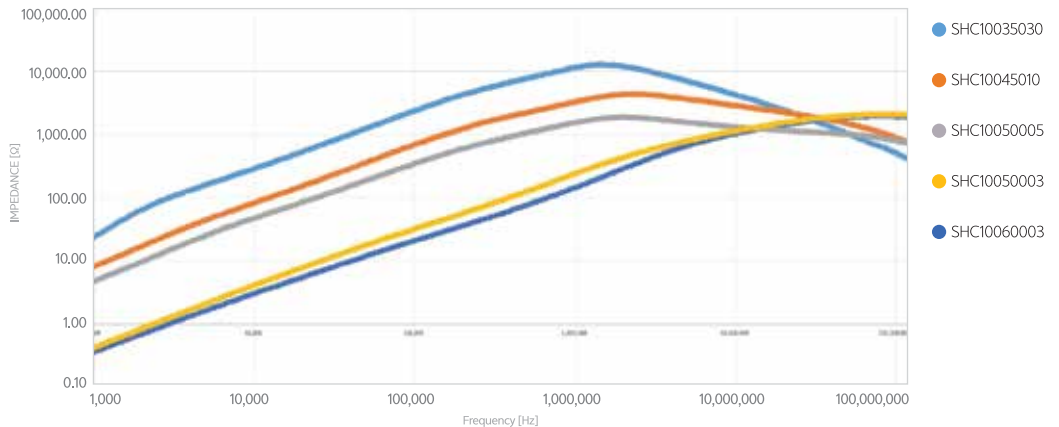
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

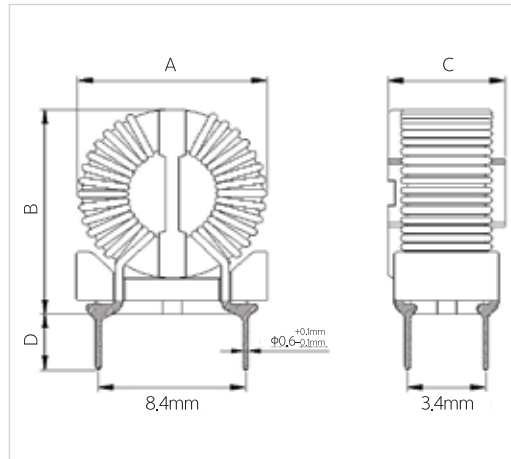
* Custom made products are also available

L / |Z| CHARACTERISTICS

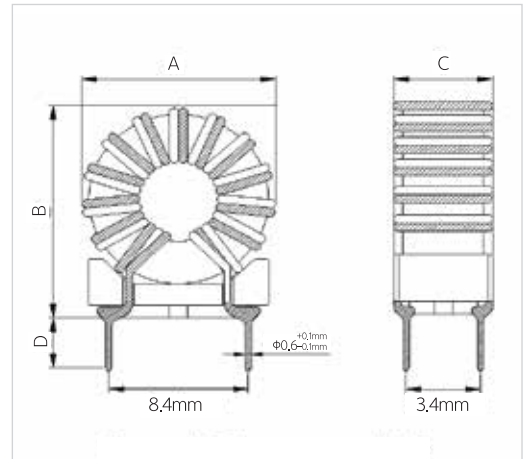


For safety and the proper usage, you are requested to approve our product specification. This contents are subject to change without advance notice. Please check with our sales or R&D before ordering.

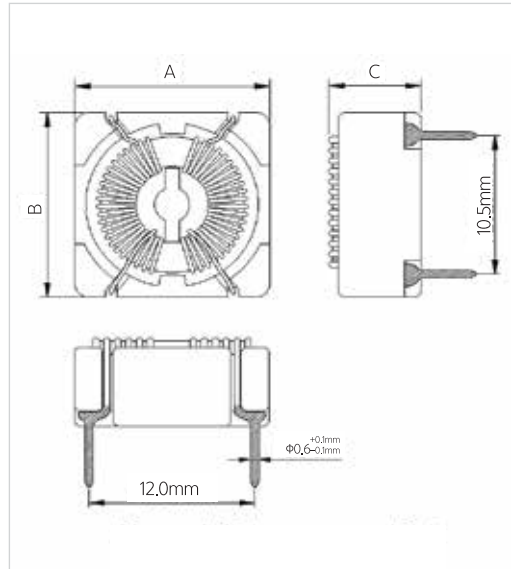
SHAPE AND DIMENSION



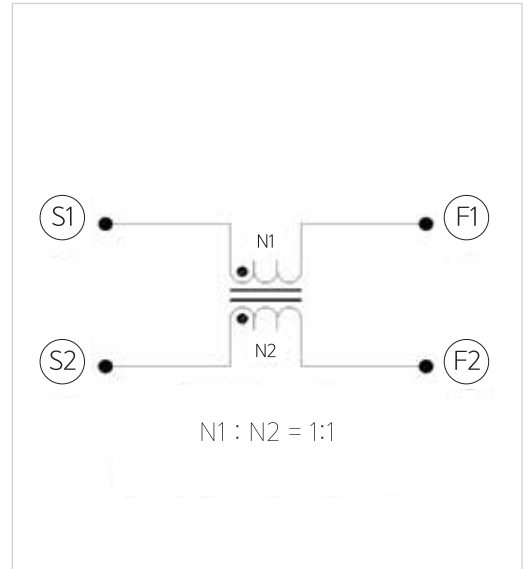
General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	14.0	16.0	10.0	4.0 \pm 1.0
PAIR WINDING TYPE	14.0	16.0	10.0	4.0 \pm 1.0
HORIZONTAL TYPE	14.5	14.5	8.0	4.0 \pm 1.0

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- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC13030280**	0.9	300	28.0	480
SHC13035200**	1.2	300	20.0	280
SHC13040120**	1.8	300	12.0	160
SHC13040070**	2.0	300	7.0	145
SHC13060005**	5.5	300	0.05	20
SHC13070005**	6.0	300	0.05	20

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 105°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

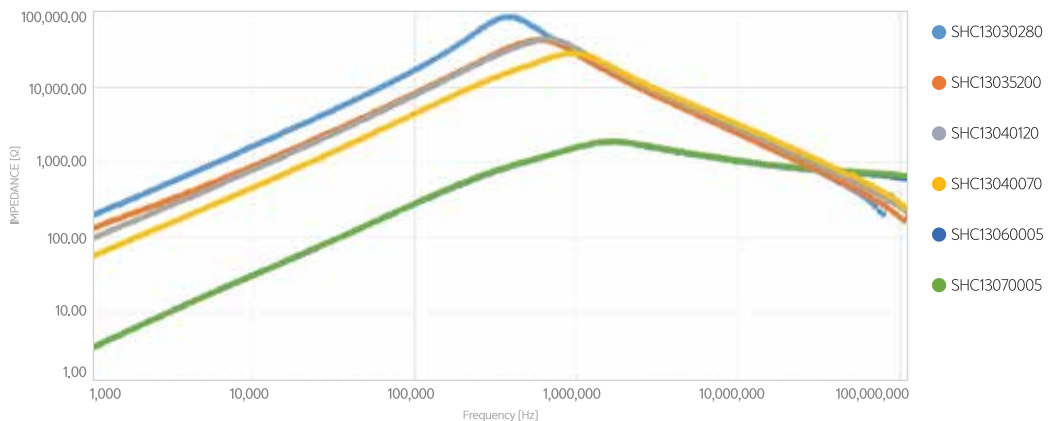
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

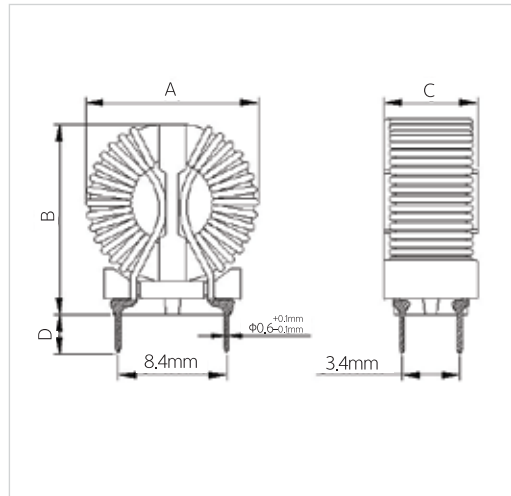
* Custom made products are also available

L / |Z| CHARACTERISTICS

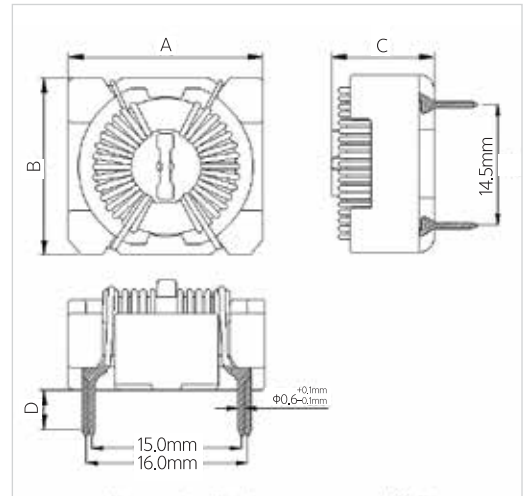


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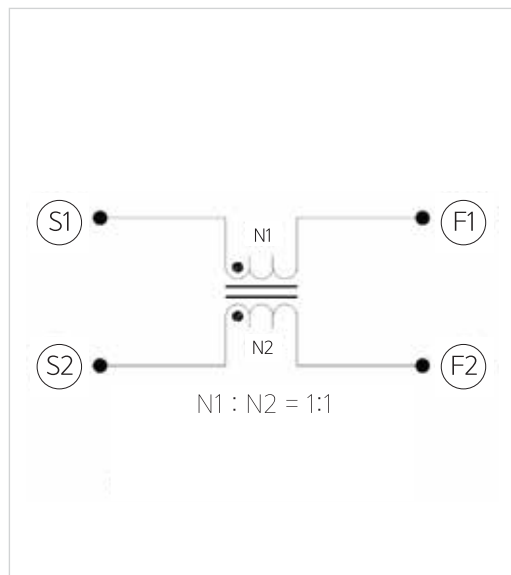
SHAPE AND DIMENSION



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	16.0	18.5	10.0	4.0 ± 1.0
HORIZONTAL TYPE	20.0	20.0	9.5	4.0 ± 1.0

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- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

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- For use in miniature equipments
- Switching power sources and switching power supply adapters
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC14030360**	0.8	300	36.0	670
SHC14035280**	1.0	300	28.0	430
SHC14040200**	1.5	300	20.0	280
SHC14045120**	2.0	300	12.0	170
SHC14050090**	2.3	300	9.0	115
SHC14055060**	3.0	300	6.0	95
SHC14060040**	3.6	300	4.0	50

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

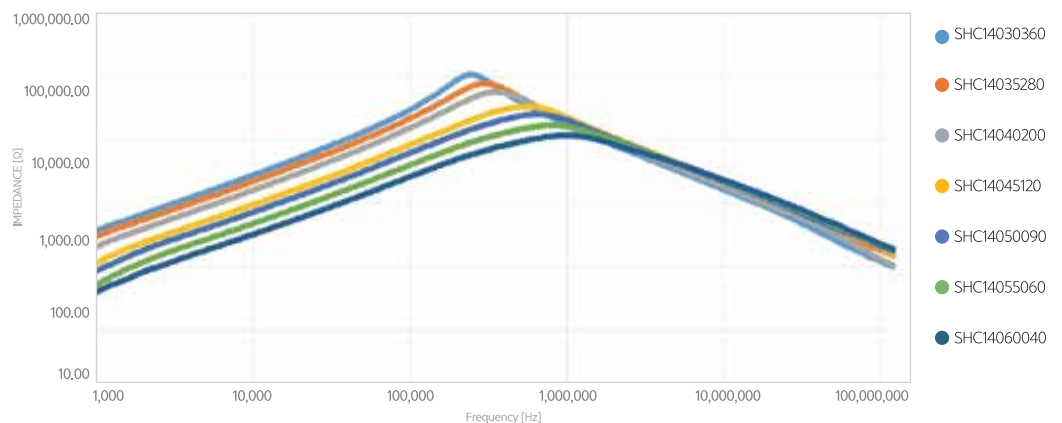
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

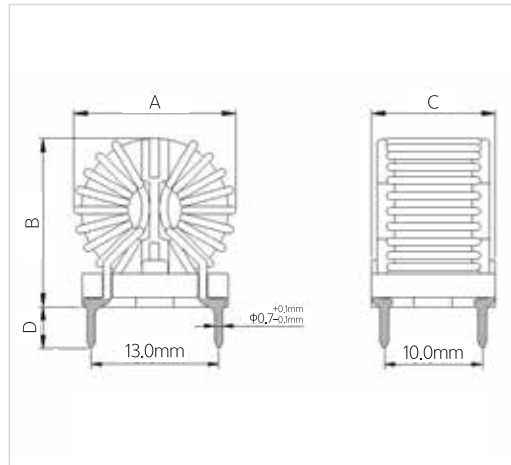
* Custom made products are also available

L / |Z| CHARACTERISTICS

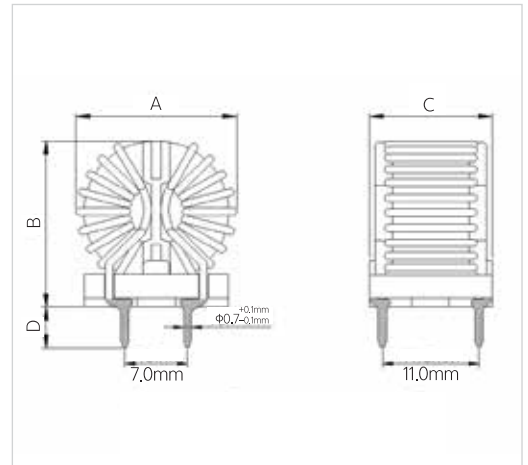


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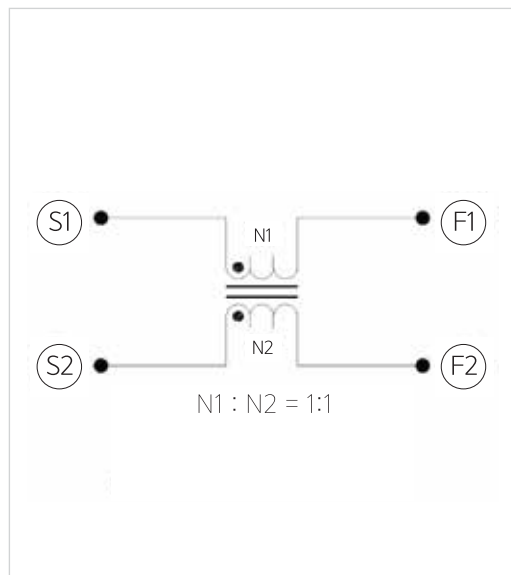
SHAPE AND DIMENSION



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
VERTICAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	18.0	20.0	15.0	4.0 ± 1.0

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APPLICATION

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- Switching power sources and switching power supply adapters
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC16040400**	1.3	300	40.0	440
SHC16045280**	1.5	300	28.0	290
SHC16050180**	2.0	300	18.0	175
SHC16050280**	2.0	300	28.0	215
SHC16055180**	2.5	300	18.0	140
SHC16060100**	3.0	300	10.0	120

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

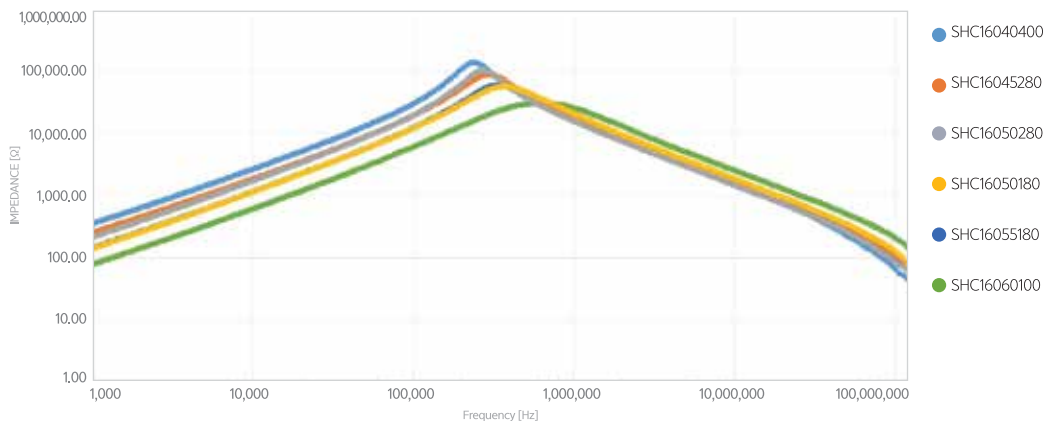
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

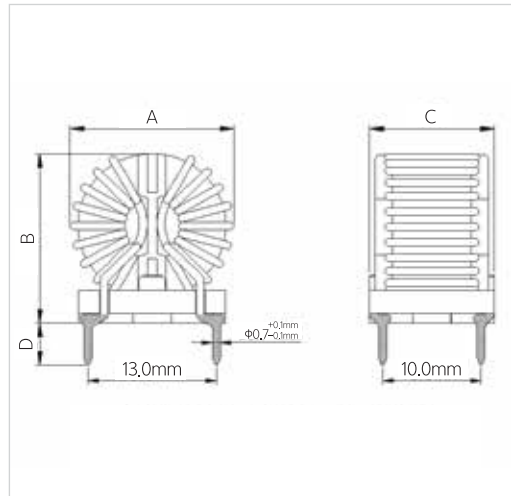
* Custom made products are also available

L / |Z| CHARACTERISTICS

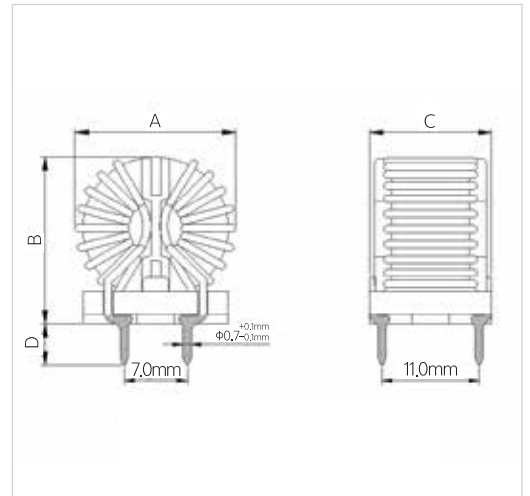


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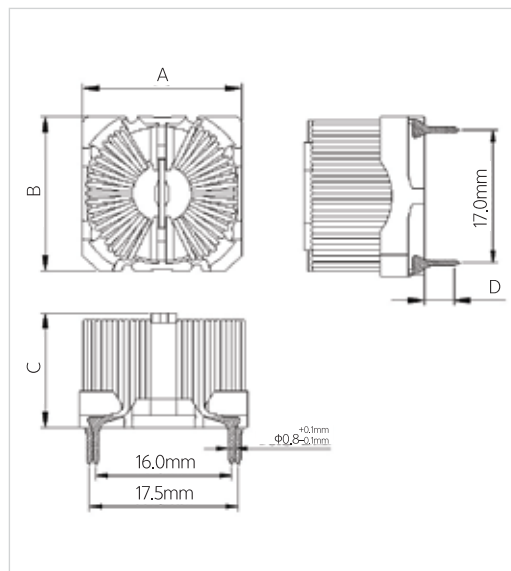
SHAPE AND DIMENSION



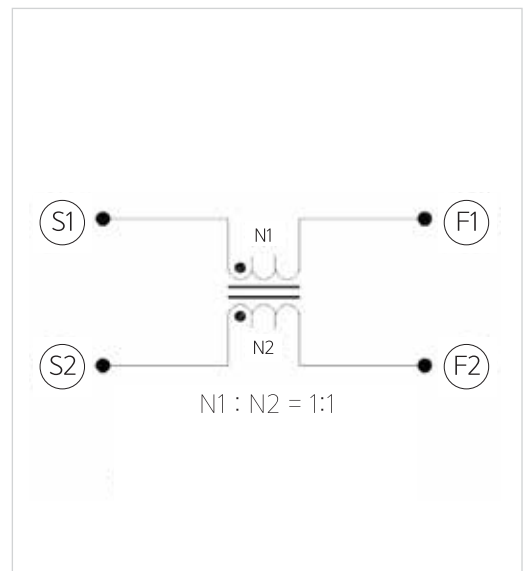
General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	21.0	23.0	15.0	4.0 \pm 1.0
HORIZONTAL TYPE	22.0	22.0	16.0	4.0 \pm 1.0

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FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

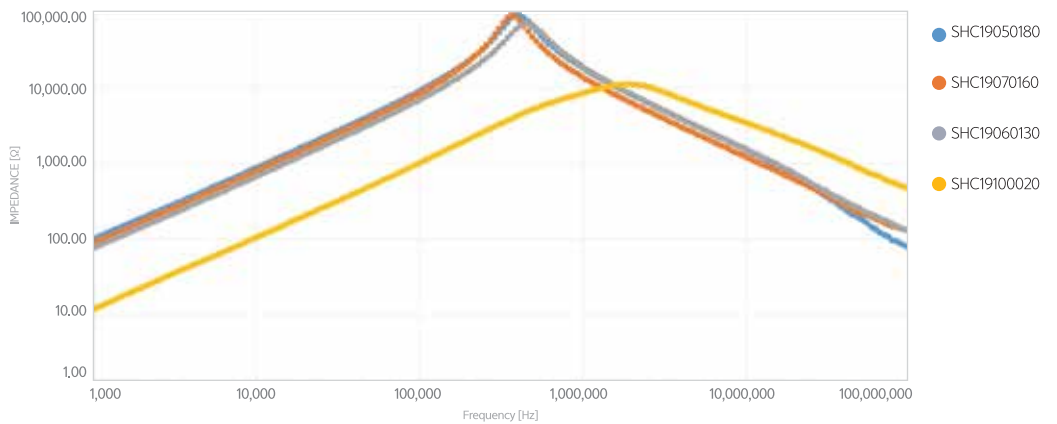
- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC19050180**	1.5	300	18.0	250
SHC19060130**	2.5	300	13.0	175
SHC19070160**	3.0	300	16.0	140
SHC19070230**	3.0	300	23.0	140
SHC19080120**	4.0	300	12.0	80
SHC19090075**	5.0	300	7.5	60
SHC19100020**	7.0	300	2.0	25
SHC19100050**	7.0	300	5.0	30

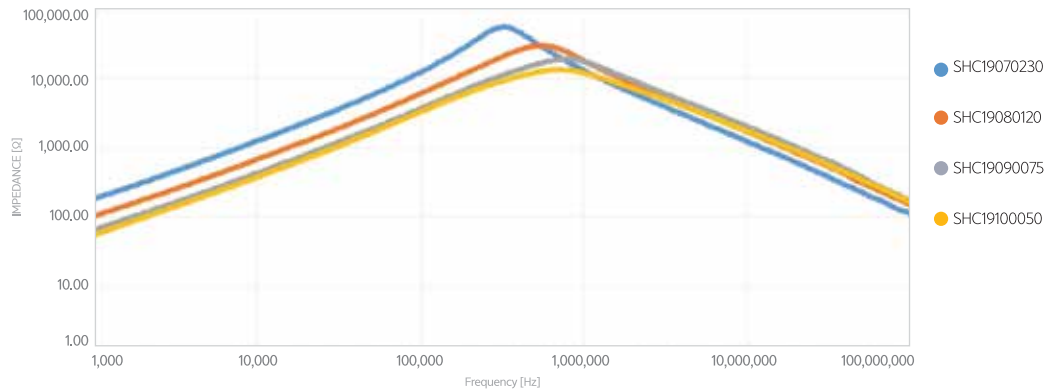
- * Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 120°C
- * Winding Temperature Rise (at Rated Current) is under 55°C
- * Rising temperature is affected by PCB condition and an amount of harmonic. Please make sure that the temperature of the coil is not exceeded the operating temperature range
- * UL94V-0 certified resin used.
- * RoHS free
- * Halogen free available
- * Custom made products are also available

L / |Z| CHARACTERISTICS

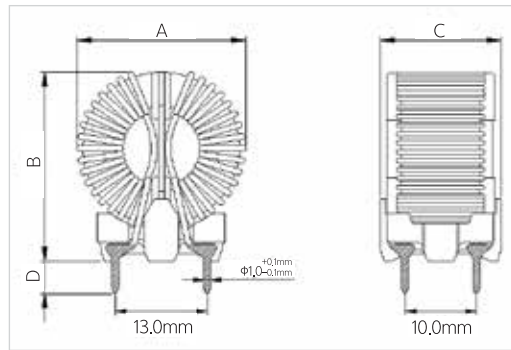


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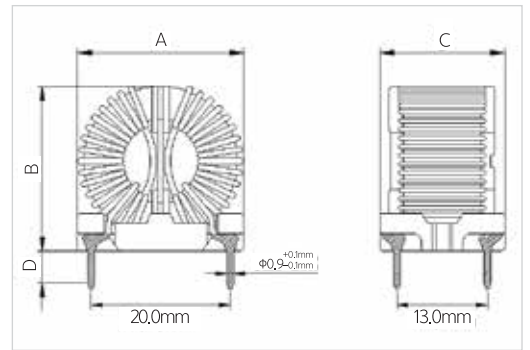
L / |Z| CHARACTERISTICS



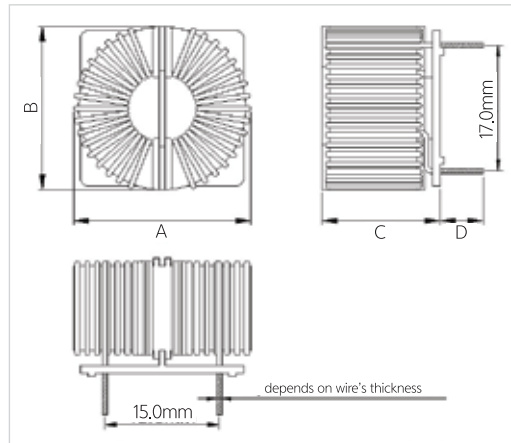
SHAPE AND DIMENSION



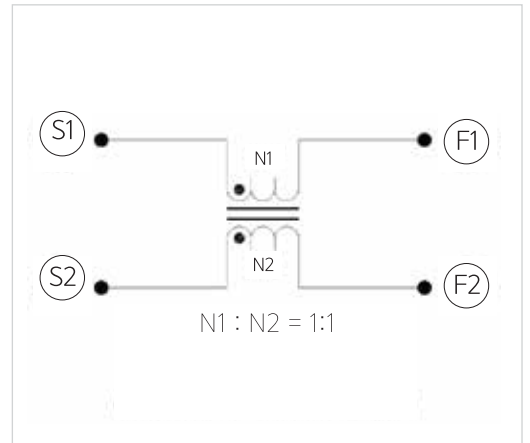
General Tolerance : ± 0.5
VERTICAL TYPE #1



General Tolerance : ± 0.5
VERTICAL TYPE #2



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE #1	25.0	30.0	20.0	4.0 \pm 1.0
VERTICAL TYPE #2	25.0	25.0	21.0	4.0 \pm 1.0
HORIZONTAL TYPE	26.0	26.0	24.0	4.0 \pm 1.0

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22Φ Slim

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC22050330**	1.8	300	33.0	300
SHC22055240**	2.1	300	24.0	200
SHC22060150**	2.5	300	15.0	150
SHC22060180**	2.5	300	18.0	150
SHC22065130**	3.0	300	13.0	115

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

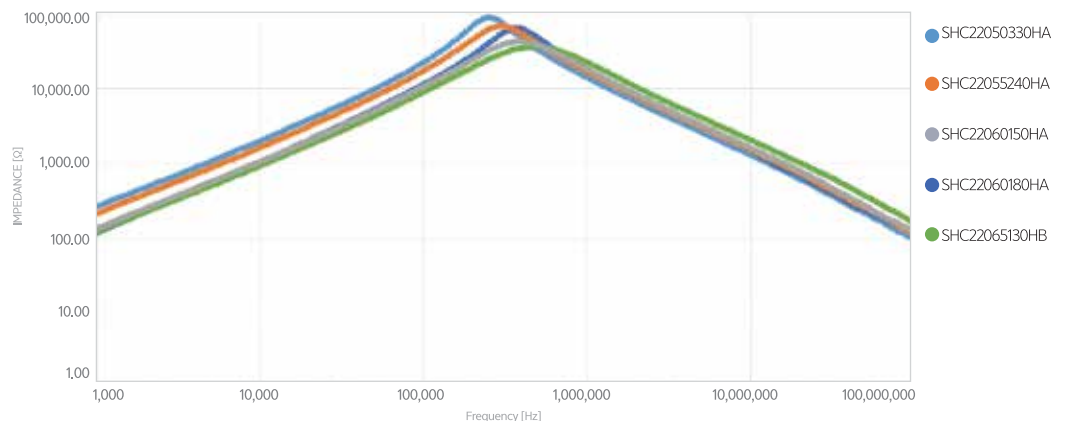
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

L / |Z| CHARACTERISTICS



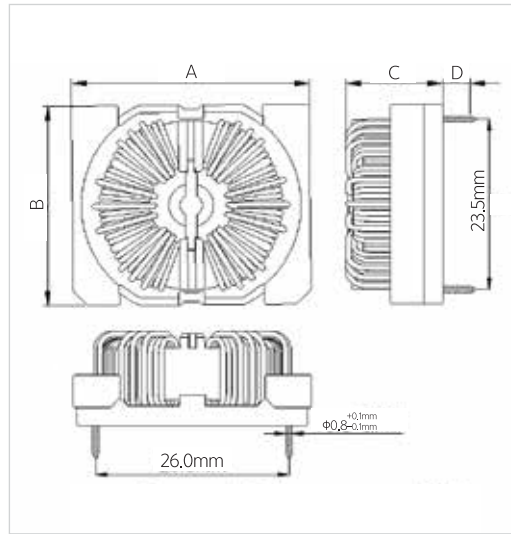
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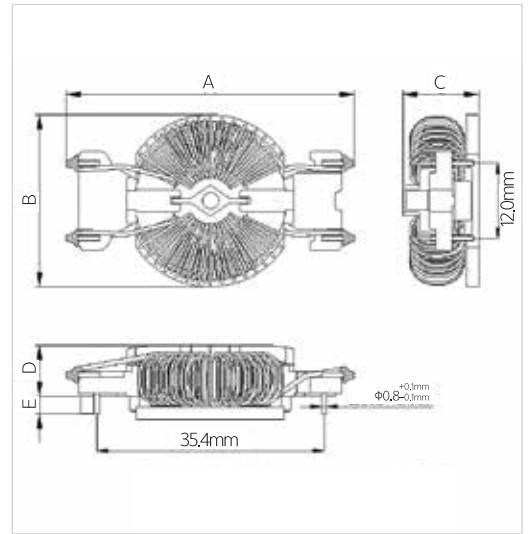
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22Φ Slim

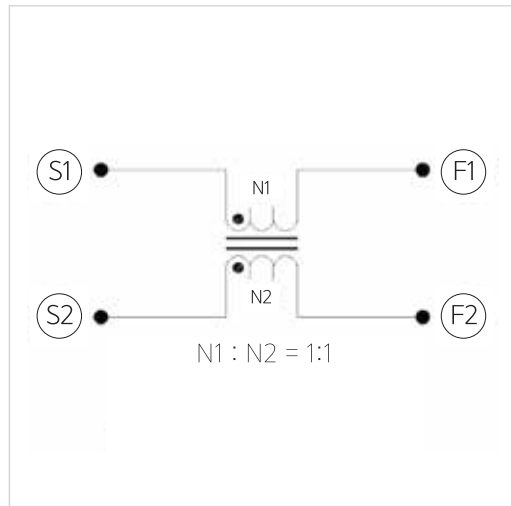
SHAPE AND DIMENSION



General Tolerance : ± 0.5
HORIZONTAL TYPE



General Tolerance : ± 0.5
SLIM TYPE



CIRCUIT DIAGRAM

TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
HORIZONTAL TYPE	34.0 MAX	29.5 MAX	14.0 MAX	4.0 \pm 1.0 Not Including Solder Fillet	-
SLIM TYPE	47.0 MAX	30.0 MAX	12.2 MAX	9.0 MAX	4.0 \pm 1.0 Not Including Solder Fillet

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- Available either vertical mounting type or horizontal mounting type



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- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC25080260**	4.0	300	26.0	95
SHC25090180**	5.0	300	18.0	70
SHC25100100**	7.0	300	10.0	50
SHC25120060**	8.0	300	6.0	30
SHC25130050**	10.0	300	5.0	20

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* Winding Temperature Rise (at Rated Current) is under 55°C

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Please make sure that the temperature of the coil is not exceeded the operating temperature range

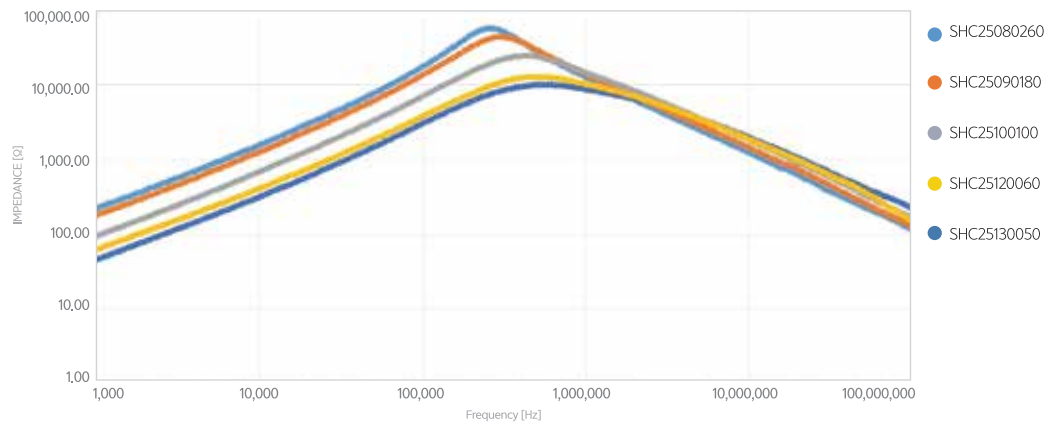
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

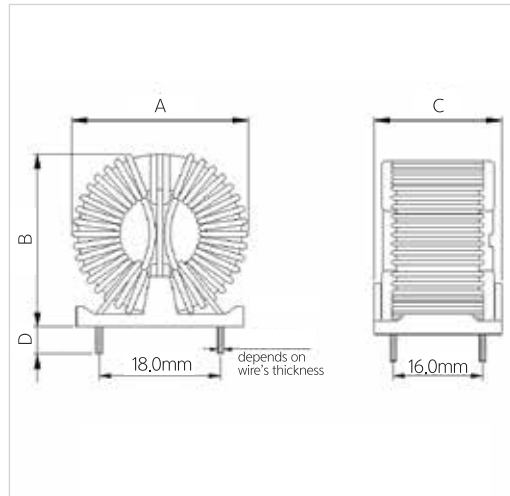
L / |Z| CHARACTERISTICS



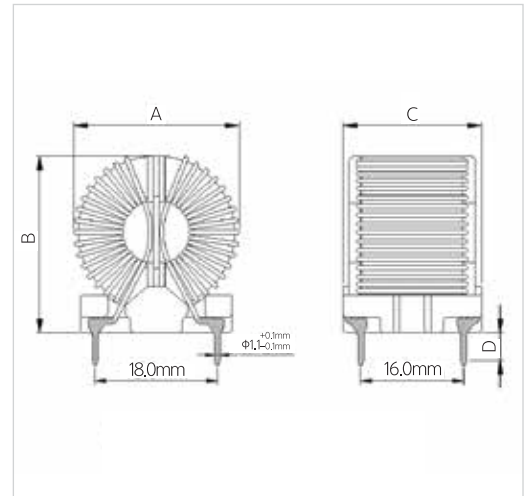
For safety and the proper usage, you are requested to approve our product specification. This contents are subject to change without advance notice.

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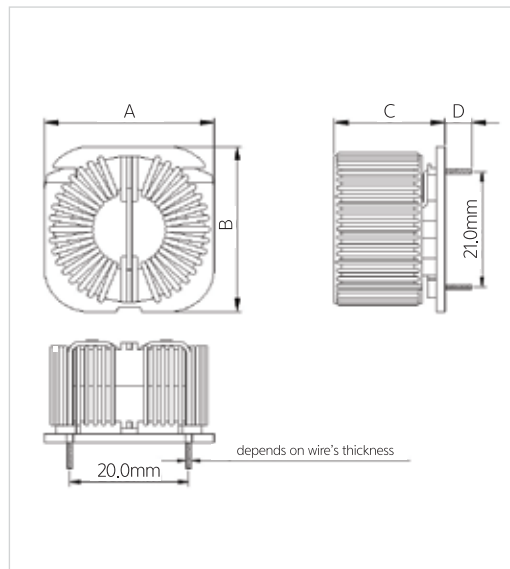
SHAPE AND DIMENSION



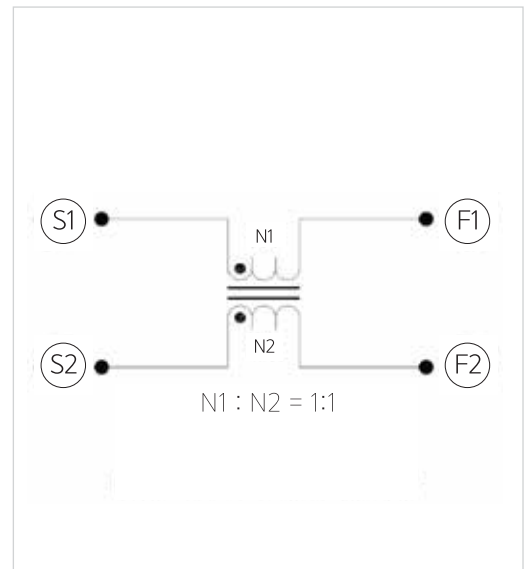
General Tolerance : ± 0.5
VERTICAL TYPE #1



General Tolerance : ± 0.5
VERTICAL TYPE #2



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE #1	33.0	35.0	25.0	4.0 \pm 1.0
VERTICAL TYPE #2	33.0	35.0	25.0	4.0 \pm 1.0
HORIZONTAL TYPE	35.0	35.0	25.0	4.0 \pm 1.0

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25 ϕ Slim

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (m Ω) MAX
SHC25055090**	3.0	300	9.0	110
SHC25075110**	4.0	300	11.0	85
SHC25080060**	5.0	300	6.0	65
SHC25090050**	6.0	300	5.0	45
SHC25100020**	8.0	300	2.0	20
SHC25075130**	4.5	300	13.0	55
SHC25080100**	5.0	300	10.0	45
SHC25090080**	6.0	300	8.0	30

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic. Please make sure that the temperature of the coil is not exceeded the operating temperature range

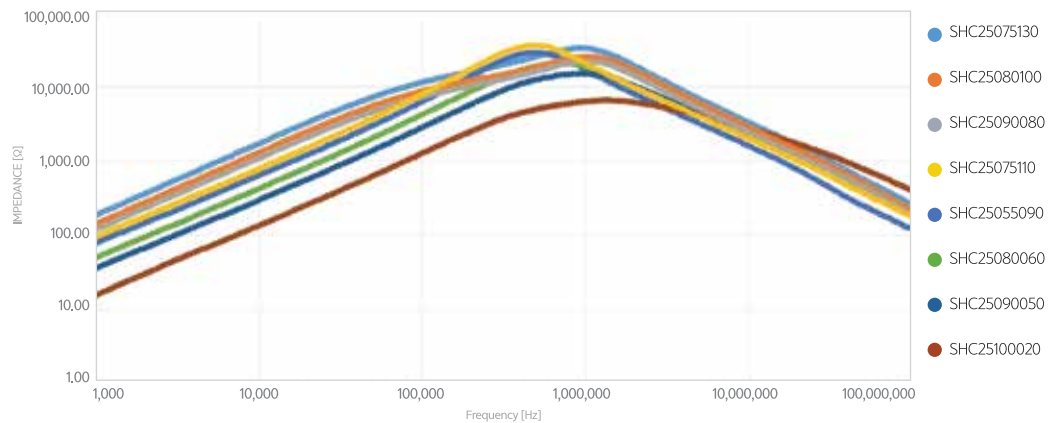
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

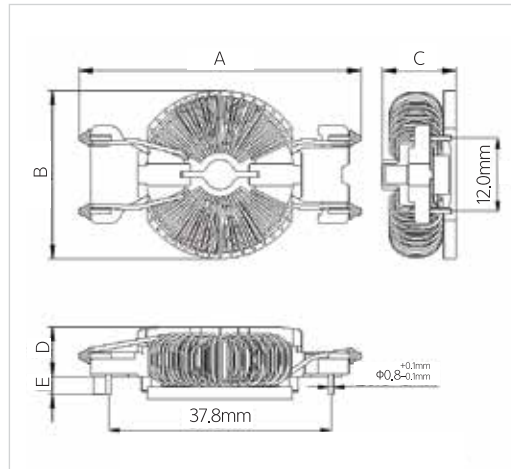
L / |Z| CHARACTERISTICS



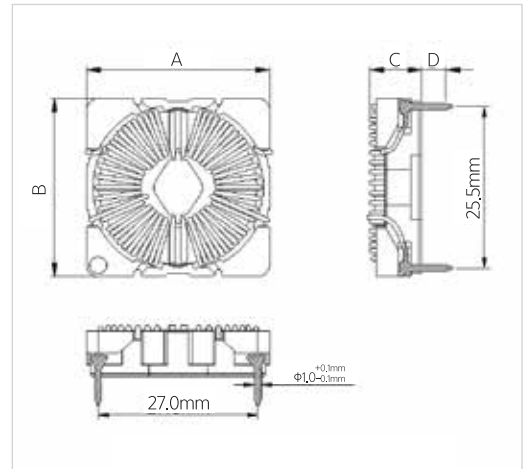
For safety and the proper usage, you are requested to approve our product specification. This contents are subject to change without advance notice. Please check with our sales or R&D before ordering.

25 ϕ Slim

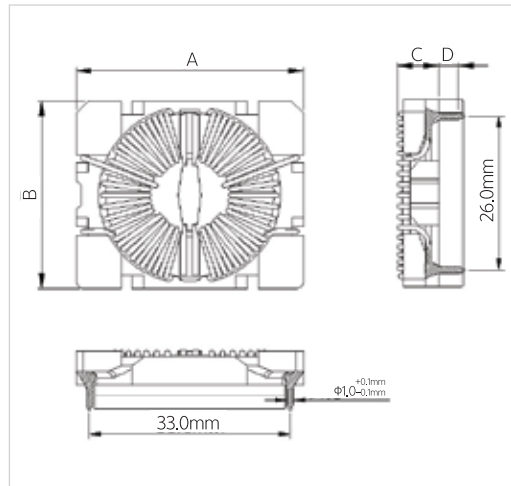
SHAPE AND DIMENSION



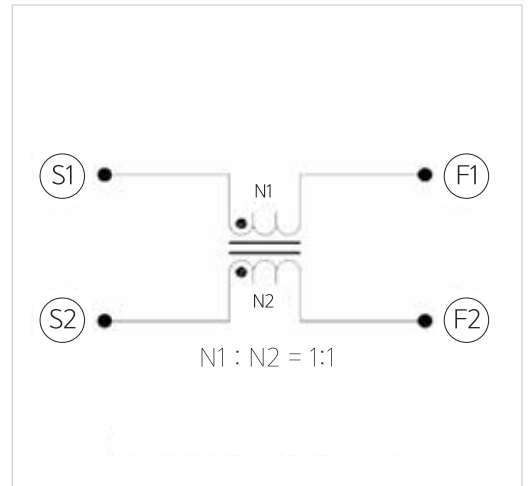
General Tolerance : $\pm 0,5$
SLIM TYPE #1



General Tolerance : $\pm 0,5$
SLIM TYPE #2



General Tolerance : $\pm 0,5$
SLIM TYPE #3



CIRCUIT DIAGRAM

TYPE	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
SLIM TYPE #1	50.0 MAX	32.0 MAX	12.2 MAX	9.0 MAX	4.0 \pm 1.0 Not Including Solder Fillet
SLIM TYPE #2	34.0 MAX	33.0 MAX	11.5 MAX	4.0 \pm 1.0 Not Including Solder Fillet	-
SLIM TYPE #3	41.0 MAX	33.0 MAX	9.0 MAX	4.0 \pm 1.0 Not Including Solder Fillet	-

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FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC31130200**	8.0	300	20.0	45
SHC31150120**	10.0	300	12.0	30
SHC31150030**	15.0	300	3.0	15
SHC31200024**	20.0	300	2.4	10

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

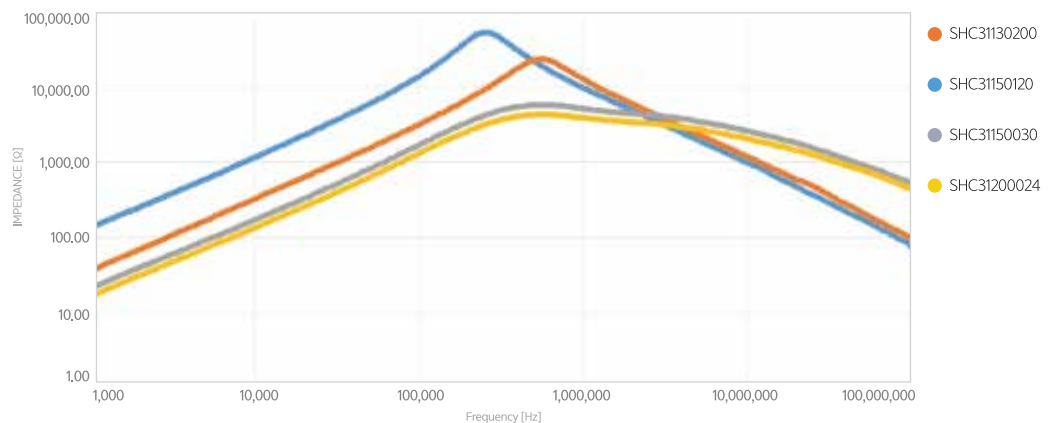
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

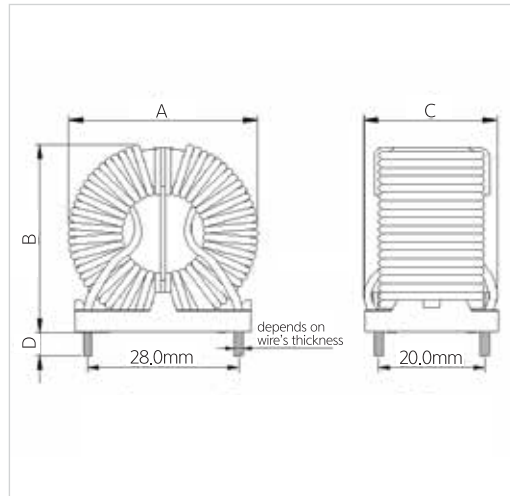
* Custom made products are also available

L / |Z| CHARACTERISTICS

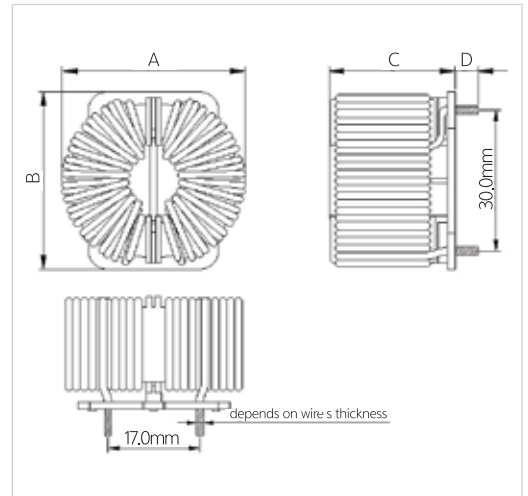


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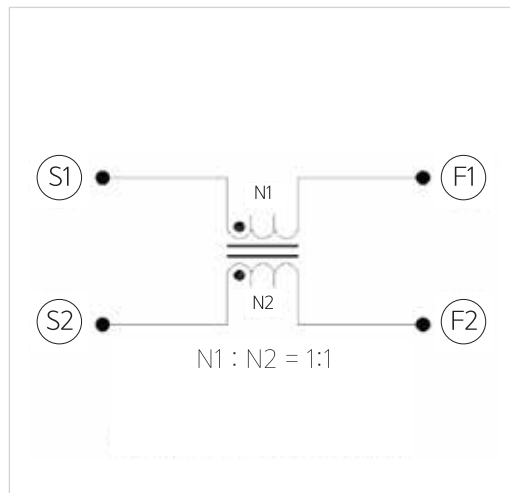
SHAPE AND DIMENSION



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	43.0	43.0	28.0	4.0 ± 1.0
HORIZONTAL TYPE	42.0	40.0	30.0	4.0 ± 1.0

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31Φ Slim

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHC31100200**	5.0	300	20.0	70
SHC31110160**	5.5	300	16.0	60
SHC31120100**	7.0	300	10.0	40

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

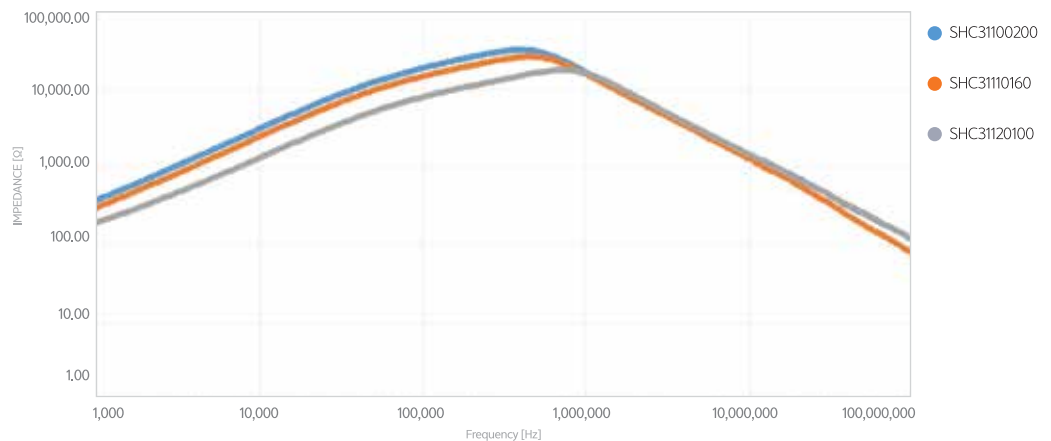
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

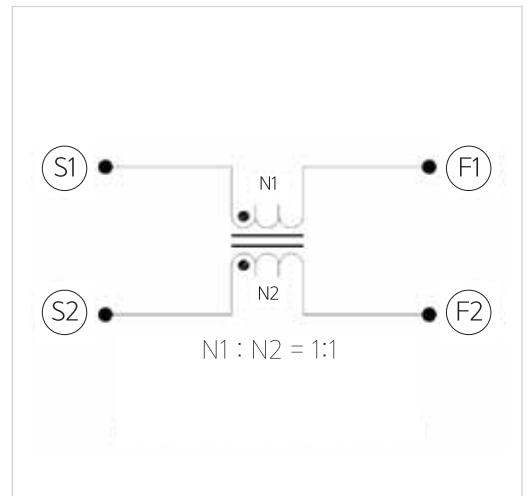
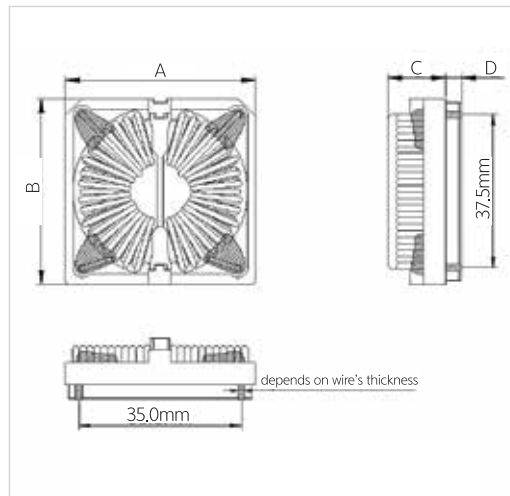
L / |Z| CHARACTERISTICS



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Please check with our sales or R&D before ordering.

31Φ Slim

SHAPE AND DIMENSION



General Tolerance : ± 0.5
SLIM TYPE

CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
SLIM TYPE	45.0	45.0	9.0	4.0 \pm 1.0 Not Including Solder Fillet

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FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

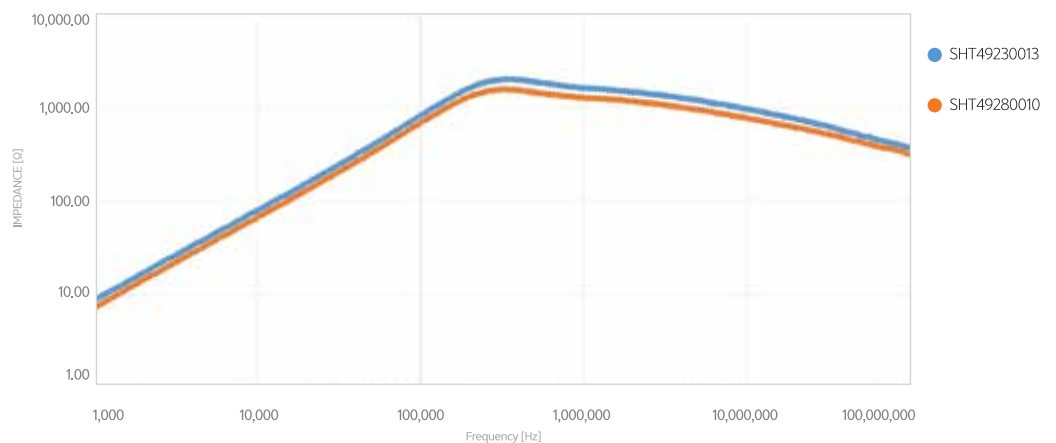
- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHT49230013**	25.0	300	1.3	5
SHT49280010**	35.0	300	1.0	3

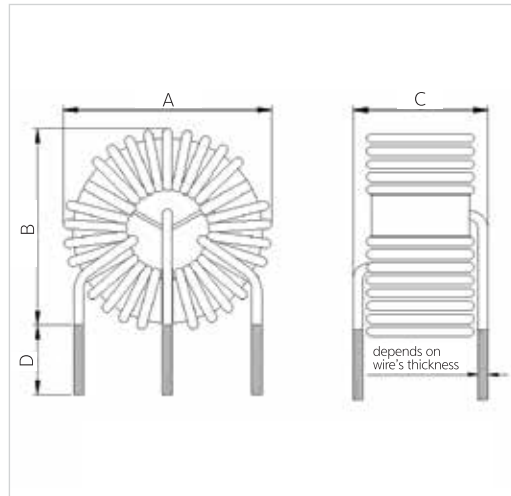
- * Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 120°C
- * Winding Temperature Rise (at Rated Current) is under 55°C
- * Rising temperature is affected by PCB condition and an amount of harmonic. Please make sure that the temperature of the coil is not exceeded the operating temperature range
- * UL94V-0 certified resin used.
- * RoHS free
- * Halogen free available
- * Custom made products are also available

L / |Z| CHARACTERISTICS

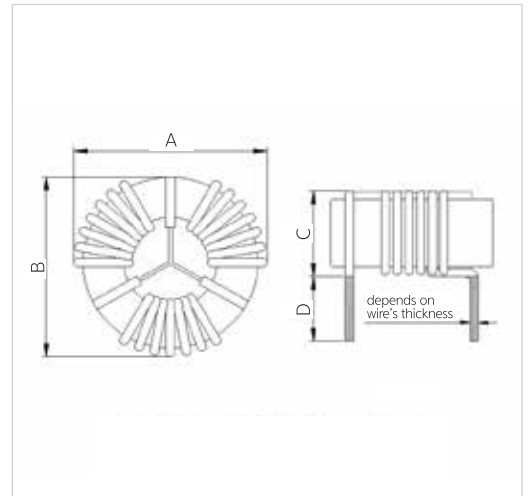


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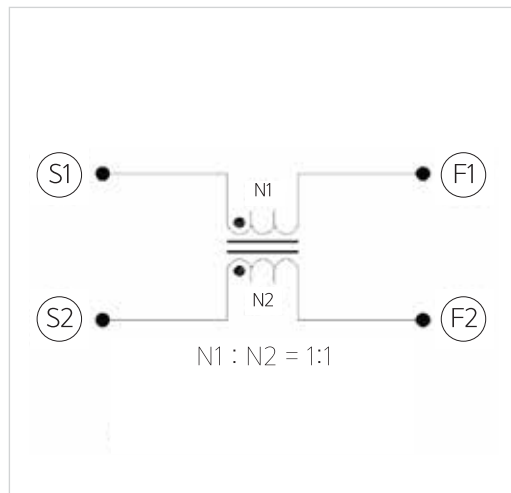
SHAPE AND DIMENSION



General Tolerance : ± 0.5
VERTICAL TYPE



General Tolerance : ± 0.5
HORIZONTAL TYPE



CIRCUIT DIAGRAM

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
VERTICAL TYPE	65.0	65.0	40.0	20.0 \pm 5.0
HORIZONTAL TYPE	65.0	65.0	40.0	20.0 \pm 5.0

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DM 13, 15Φ

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (uH) ± 20%	DC Resistance (mΩ) MAX
SHN13040300**	1.5	300	300.0	310
SHN13050220**	2.0	300	220.0	155
SHN15030A00**	1.0	300	1000.0	1155
SHN15055300**	3.0	300	300.0	200
SHN15060200**	3.5	300	200.0	110
SHN15065150**	3.8	300	150.0	80

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 105°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

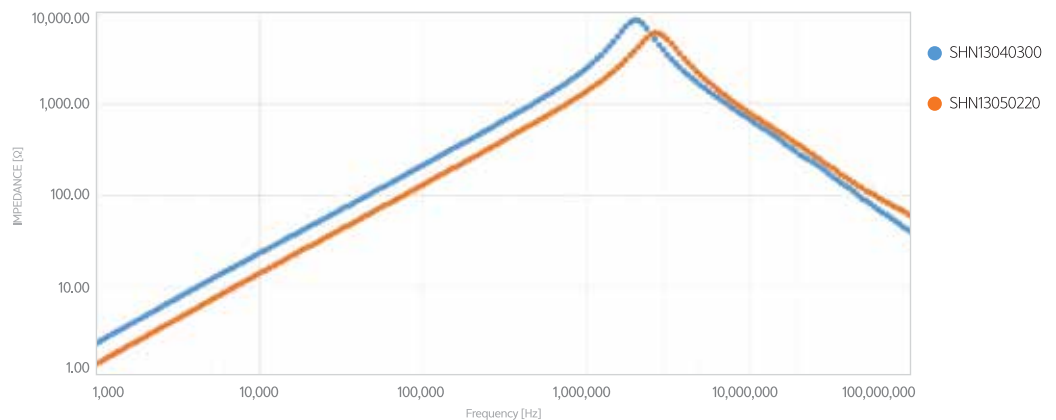
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

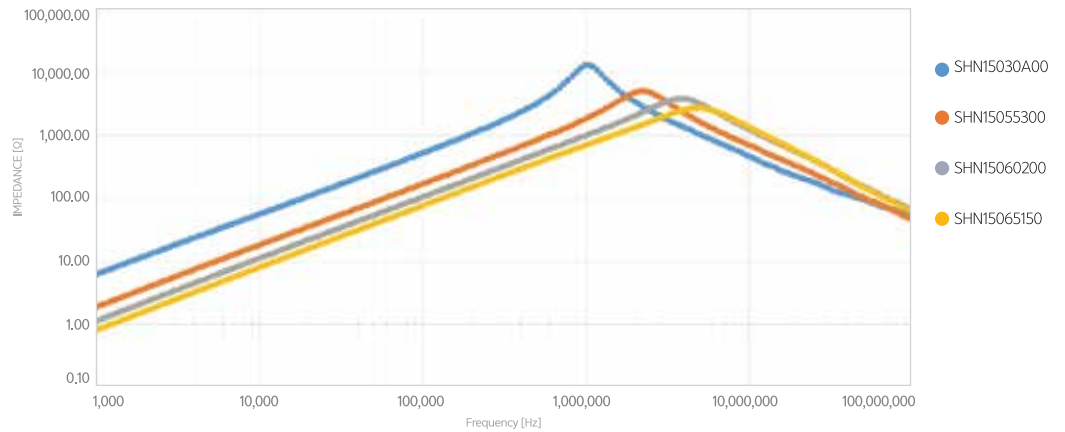
L / |Z| CHARACTERISTICS



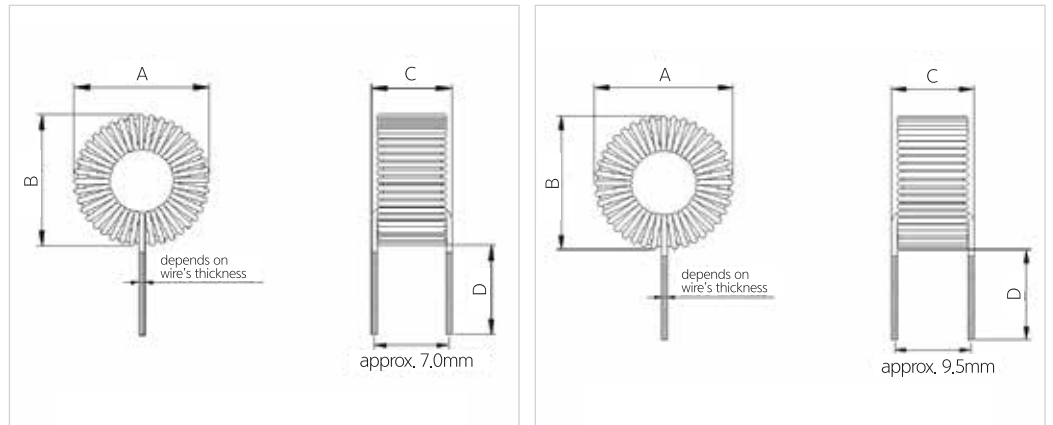
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DM 13, 15Φ

L / |Z| CHARACTERISTICS



SHAPE AND DIMENSION



General Tolerance : ± 0.5
Φ13 DM TYPE

General Tolerance : ± 0.5
Φ15 DM TYPE

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
Φ13 DM TYPE	16.0	16.0	10.0	8.0 \pm 2.0
Φ15 DM TYPE	19.0	19.0	12.0	8.0 \pm 2.0

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DM 18, 20Φ

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (uH) ± 20%	DC Resistance (mΩ) MAX
SHN18070045**	5.0	300	45.0	40
SHN18080140**	5.5	300	140.0	55
SHN18090080**	6.5	300	80.0	60
SHN18080045**	7.0	300	45.0	35
SHN20065450**	3.0	300	450.0	140
SHN20090200**	5.0	300	200.0	70
SHN20095150**	6.0	300	150.0	45

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 105°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

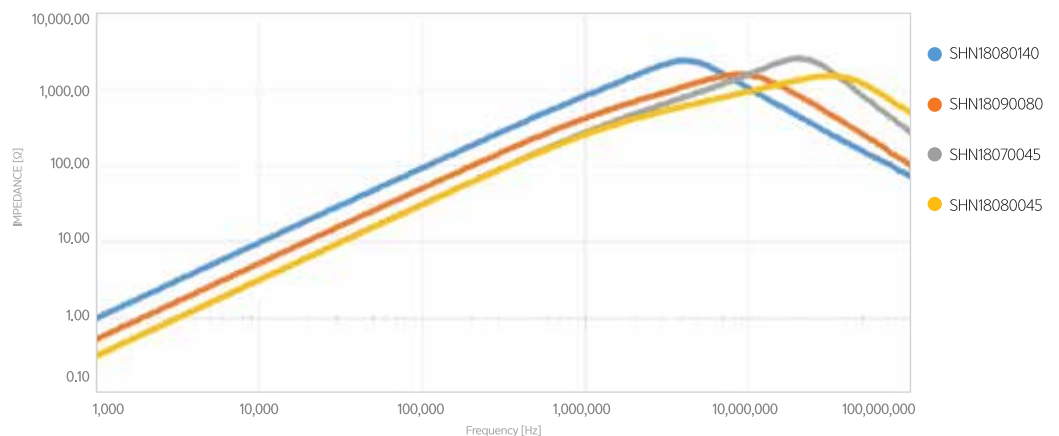
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

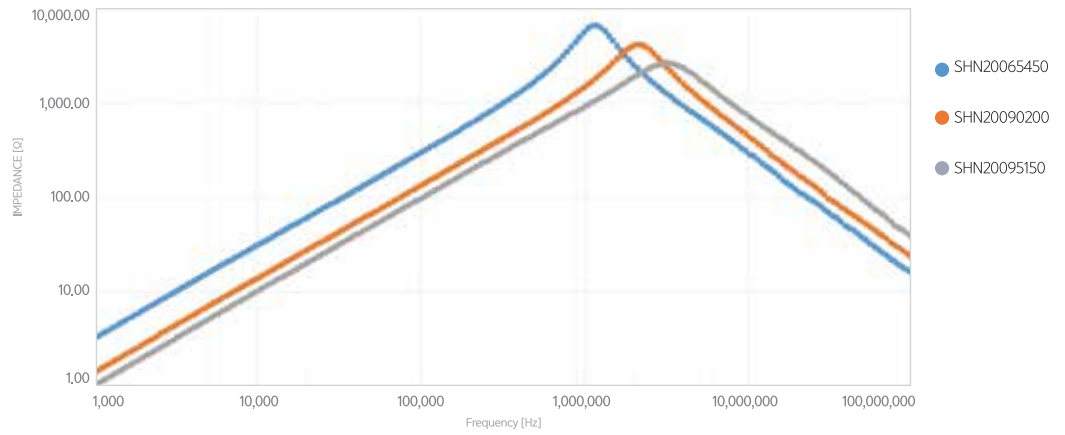
L / |Z| CHARACTERISTICS



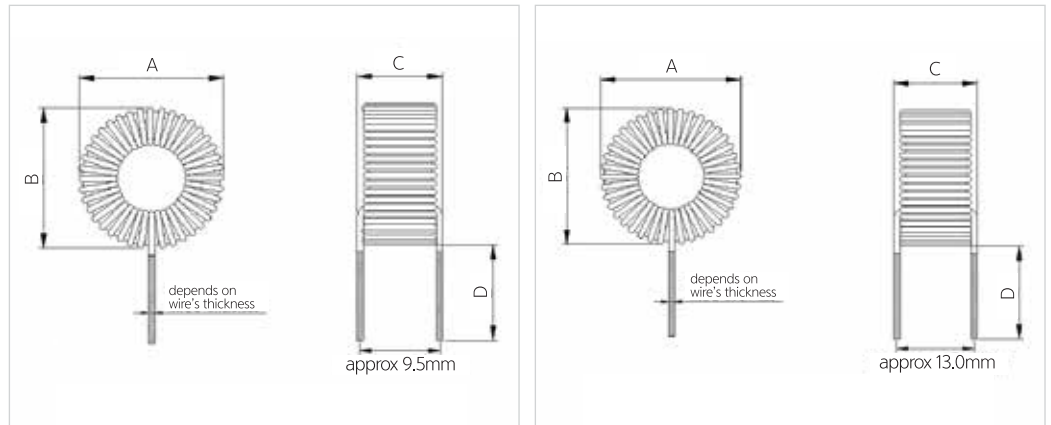
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DM 18, 20Φ

L / |Z| CHARACTERISTICS



SHAPE AND DIMENSION



General Tolerance : ± 0.5
 $\Phi 17.5$ DM TYPE

General Tolerance : ± 0.5
 $\Phi 20$ DM TYPE

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
$\Phi 17.5$ DM TYPE	22.0	22.0	15.0	15.0 \pm 5.0
$\Phi 20.0$ DM TYPE	27.0	27.0	14.0	15.0 \pm 5.0

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EARTH INDUCTOR

FEATURES

- PCB mounting type for general purpose
- Excellent frequency characteristics
- Use of insulating material having superior flame resistance
- Available either vertical mounting type or horizontal mounting type



APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Rated Current (A)	Rated Voltage (V)	Inductance (mH) +50%, -30%	DC Resistance (mΩ) MAX
SHE10080005**	20.0	300	5.0	5
SHE10100020**	20.0	300	20.0	10

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 105°C

* Winding Temperature Rise (at Rated Current) is under 55°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

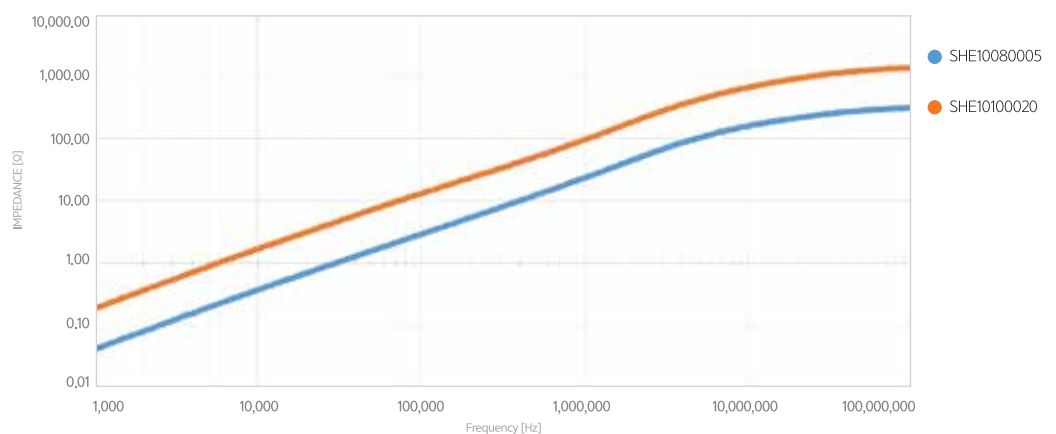
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

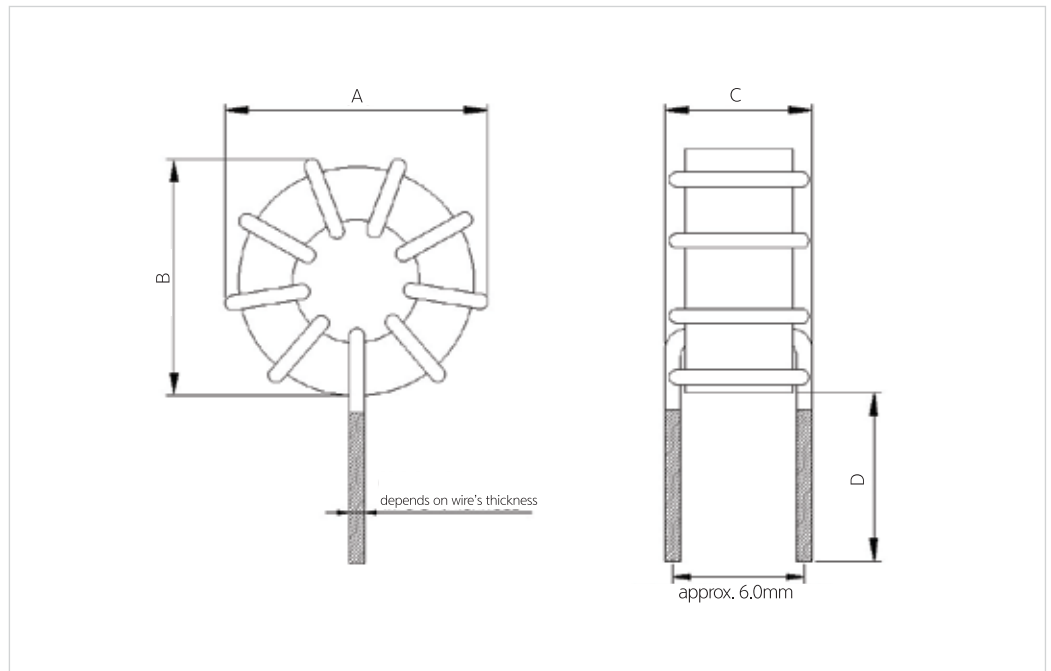
L / |Z| CHARACTERISTICS



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EARTH INDUCTOR

SHAPE AND DIMENSION



General Tolerance : $\pm 0,5$
EARTH INDUCTOR

TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm) Not Including Solder Fillet
EARTH INDUCTOR	15.0	14.0	9.0	8.0 ± 2.0

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Please check with our sales or R&D before ordering.

BAR CHOKE

FEATURES

- PCB mounting type for miniature general purpose
- Require small space of PCB
- Excellent frequency characteristics
- Compact, and provide a large inductance
- Use of insulating material having superior flame resistance



APPLICATION

- Digital equipments
- For use in miniature equipments
- Switching power sources and switching power supply adapters
- Various types of electronic equipments

PART No & SPECIFICATION

Part No	Type of Wire (Φ)	Turns (ref)	Inductance (mH) ±10%, at 1KHz / 1V	DC Resistance (Ω) MAX
R04101KB00	0.10	68.5	0.1	2.00
R06470KB00	0.35	40.5	0.047	0.20
R06102KB00	0.16	185.5	1.0	3.00
R08B102KB00	0.23	173.5	1.0	1.50
R10332KB00	0.20	268.5	3.3	3.75

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise) : -25°C to 65°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

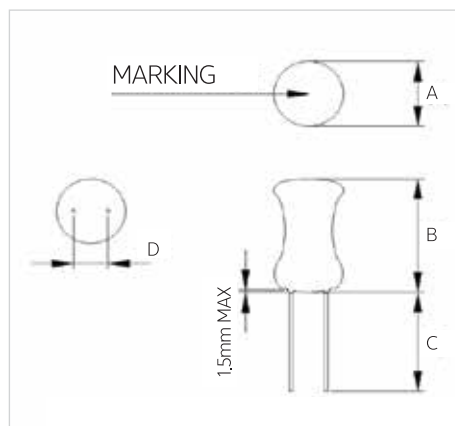
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

SHAPE AND DIMENSION



TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm)
R04 TYPE	5.0	9.5	10.0	2.5 ± 0.5
R06 TYPE	8.0	11.0	10.0	3.5 ± 0.5
R08 TYPE	9.5	16.0	10.0	5.0 ref
R10 TYPE	13.0	16.0	10.0	7.0 ± 1.0

For safety and the proper usage, you are requested to approve our product specification.

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Please check with our sales or R&D before ordering.

General Tolerance : ±0.5
PEAKING COIL

POWER TRANS

FEATURES

- PCB mounting type for general purpose
- Use of insulating material having superior flame resistance

APPLICATION

- Digital equipments
- for Digital Audio equipments



PART No & SPECIFICATION

Part No	1'st Turns	2'nd Turns	3'rd Turns
SHTT453H4L700A	4	21	7

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 105°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

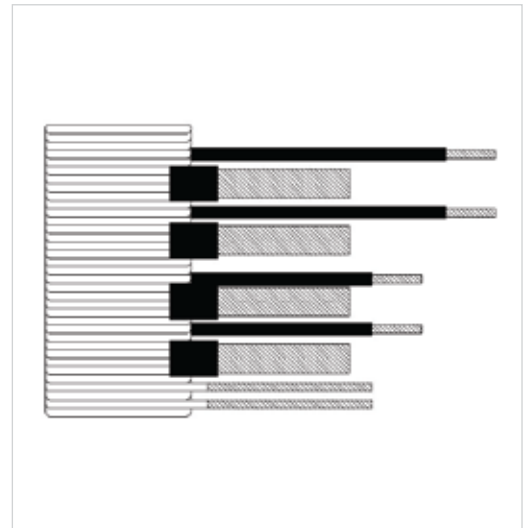
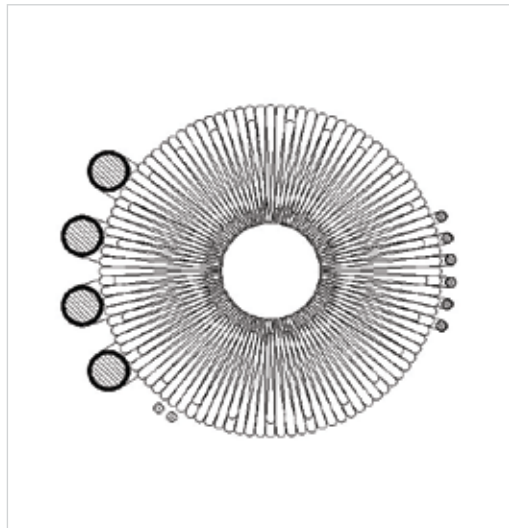
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

SHAPE



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This contents are subject to change without advance notice.
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RECTANGLE TYPE REACTOR

FEATURES

- Help to adapt to various conditions such as sudden voltage changes
- Use of insulating material having superior flame resistance

APPLICATION

- for Solar Power Generation
- for Electric Vehicle
- for Home Appliances
- for Renewable Energy
- for Ballaster Water

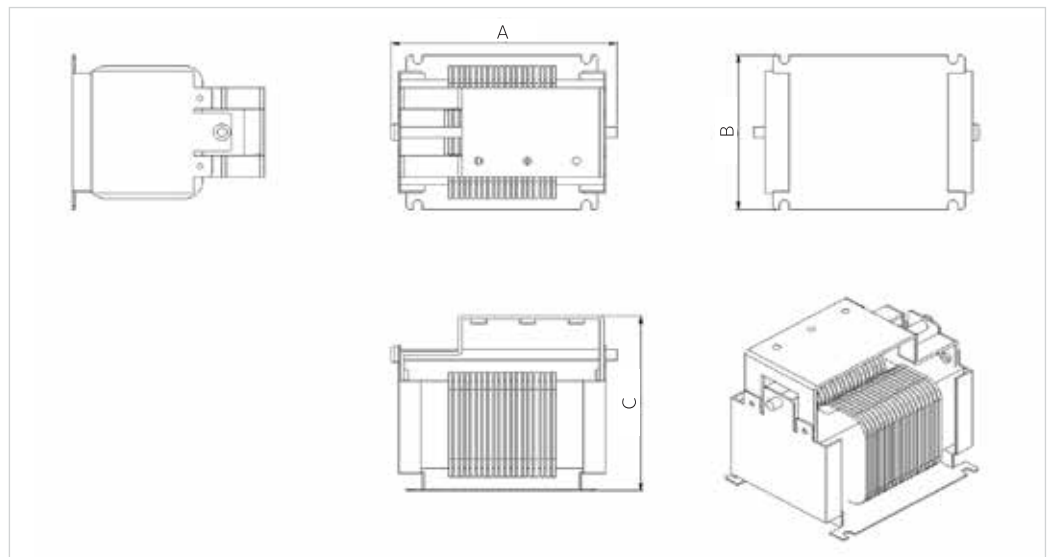


PART No & SPECIFICATION

Part No	Division	Current (A)	Inductance (mH)	Wire (Φ)
RECTANGLE REACTOR	DC	60.0	1.0	2.0T X 10.0W

- * Rising temperature is affected by PCB condition and an amount of harmonic. Please make sure that the temperature of the coil is not exceeded the operating temperature range
- * UL94V-0 certified resin used.
- * RoHS free
- * Halogen free available
- * Custom made products are also available

SHAPE



TYPE	A (mm) MAX	B (mm)	C (mm)
RECTANGLE REACTOR	125.0	88.0 ± 0.3	100.5 ± 0.6

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TOROID TYPE REACTOR

FEATURES

- Help to adapt to various conditions such as sudden voltage changes
- Use of insulating material having superior flame resistance

APPLICATION

- for Solar Power Generation
- for Electric Vehicle
- for Home Appliances
- for Renewable Energy

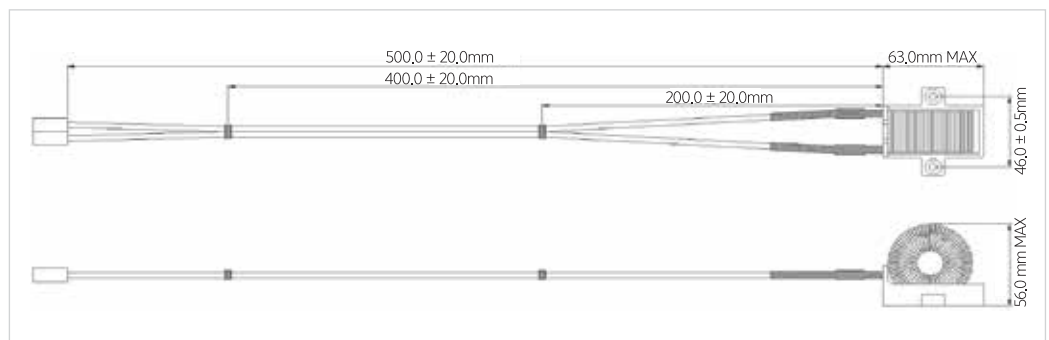


PART No & SPECIFICATION

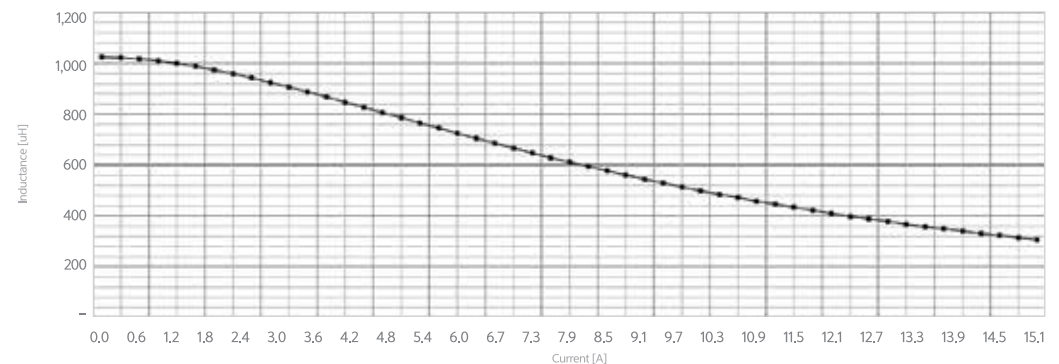
Part No	Division	Current (A)	Inductance (mH)	Wire (Φ)
SHN47150A00V0	DC	8.0	1.0	1.5

- * Rising temperature is affected by PCB condition and an amount of harmonic. Please make sure that the temperature of the coil is not exceeded the operating temperature range
- * UL94V-0 certified resin used.
- * RoHS free
- * Halogen free available
- * Custom made products are also available

SHAPE



DC Bias Graph



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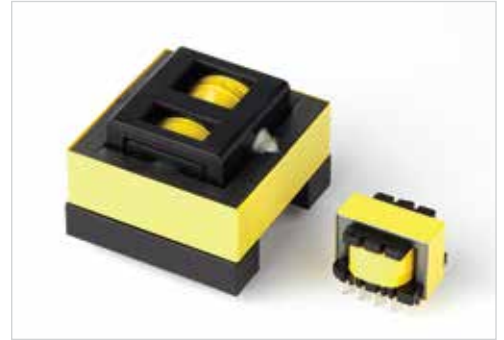
TRANS

FEATURES

- PCB mounting type for general purpose
- Use of insulating material having superior flame resistance

APPLICATION

- Digital equipments
- Personal computer and peripherals
- Switching power sources and switching power supply
- Various types of electronic equipments



PART No & SPECIFICATION

Part No	Inductance (uH) ± 10%	Leakage Inductance (uH) MAX	WITHSTANDING VOLTAGE (KV)	WITHSTANDING VOLTAGE (KV)
SHTD414V600uA	600.0	20.0	1.05	3.0
SHTE285V940uA	940.0	210.0	1.3	3.0
SHTF204H900uA	900.0	100.0	1.5	3.0
SHTP325V530uA	530.0	20.5	0.50	3.0
SHTR492H1.5mA	1500.0	180.0	0.55	4.0

* Operating Temperature Range (Including Ambient Temperature Range and Winding Temperature Rise)
: -25°C to 120°C

* Rising temperature is affected by PCB condition and an amount of harmonic.

Please make sure that the temperature of the coil is not exceeded the operating temperature range

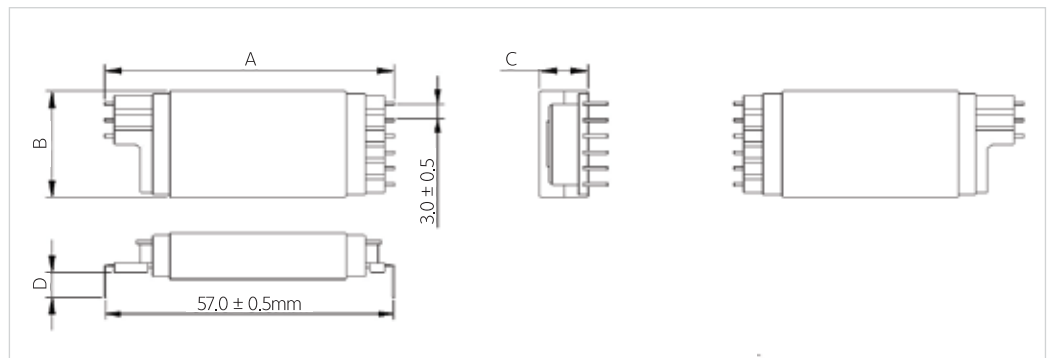
* UL94V-0 certified resin used.

* RoHS free

* Halogen free available

* Custom made products are also available

SHAPE AND DIMENSION

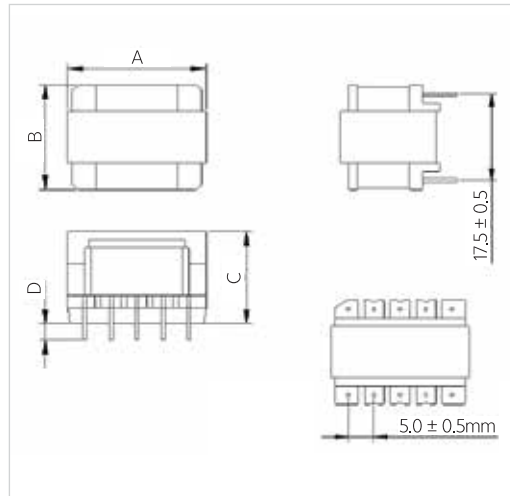


General Tolerance : ±0,5
EDR4110 TYPE

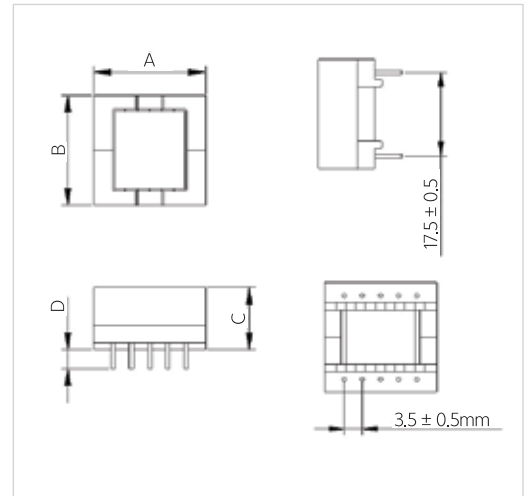
TYPE	A (mm) MAX	B (mm) MAX	C (mm) MAX	D (mm)
EDR 4110(V)	60.0	23.0	10.0 / 12.0	4.0 ± 1.0

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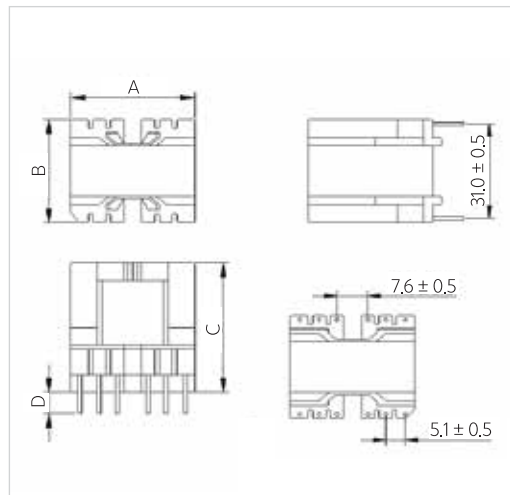
SHAPE AND DIMENSION



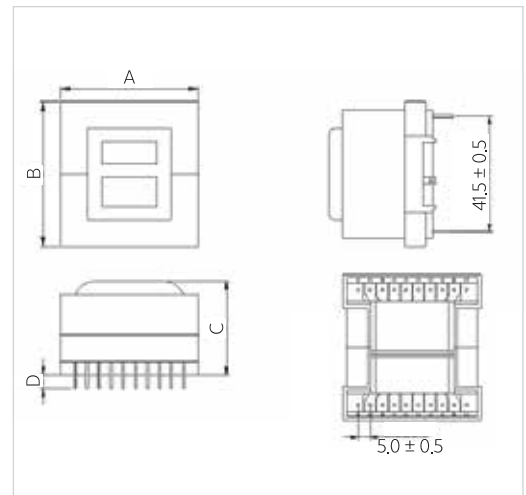
General Tolerance : ±0.5
EE2820(V) TYPE



General Tolerance : ±0.5
EFD2020(H) TYPE



General Tolerance : ±0.5
PQ3220 TYPE



General Tolerance : ±0.5
ER4950(2S/H) TYPE

TYPE	A (mm)	B (mm)	C (mm)	D (mm) Not Including Solder Fillet
EE2820(V)	31.5	25.5	25.0	4.0 ± 1.0
EFD2020(H)	23.0	23.0	13.0	4.0 ± 1.0
PQ3220(V)	34.0	36.0	23.0	4.0 ± 1.0
ER4950(2S/H)	55.0	57.0	36.0	4.0 ± 1.0

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