

HIGH CURRENT POWER INDUCTORS

CEP 104 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

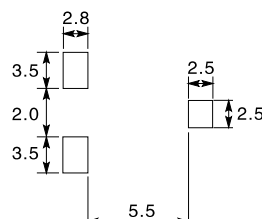
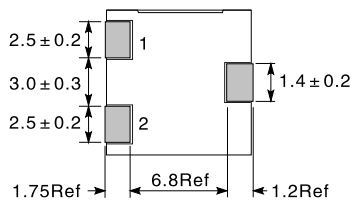
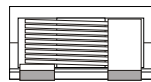
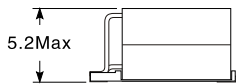
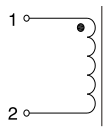
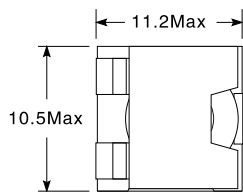
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)Max	DC saturation current			Temperature rise 40°C current (A)Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP104-0R8	0.8	4.0	24.9	25.2	25.6	16.3
CEP104-1R0	1.0	4.0	16.5	17.0	17.5	16.3
CEP104-1R2	1.2	6.0	20.5	21.0	21.3	15.0
CEP104-1R3	1.3	4.0	12.9	16.8	17.2	16.3
CEP104-1R5	1.5	4.0	13.5	14.0	14.5	16.3
CEP104-1R8	1.8	6.0	13.3	13.8	14.3	15.0
CEP104-2R0	2.0	9.0	15.3	15.8	16.2	11.5
CEP104-2R2	2.2	4.0	8.9	9.6	10.0	16.3
CEP104-2R5	2.5	7.5	11.4	11.8	12.1	12.0
CEP104-3R2	3.2	6.0	7.3	8.0	8.5	15.0
CEP104-4R0	4.0	9.0	8.3	8.5	8.8	11.5
CEP104-4R3	4.3	7.5	6.4	6.8	7.0	12.0
CEP104-5R7	5.7	9.0	5.4	5.8	6.0	11.5

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

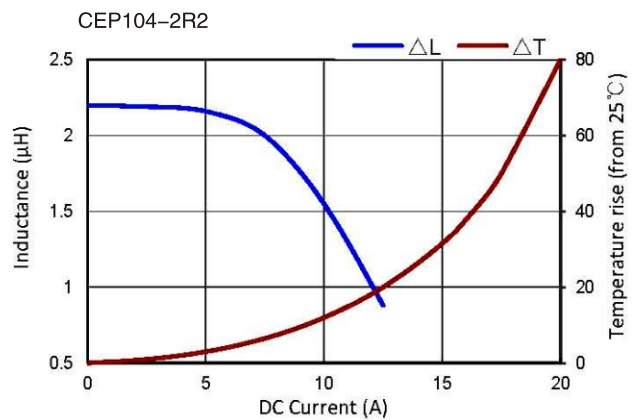
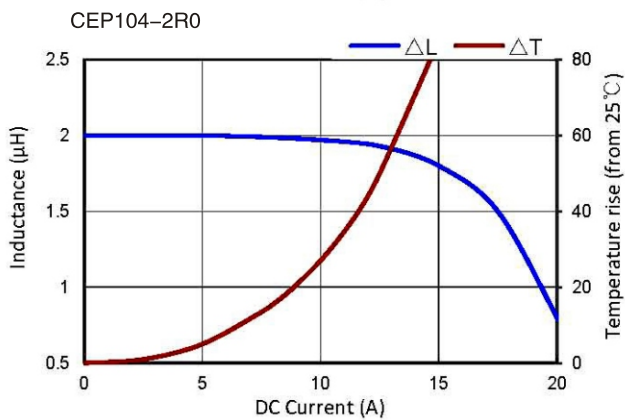
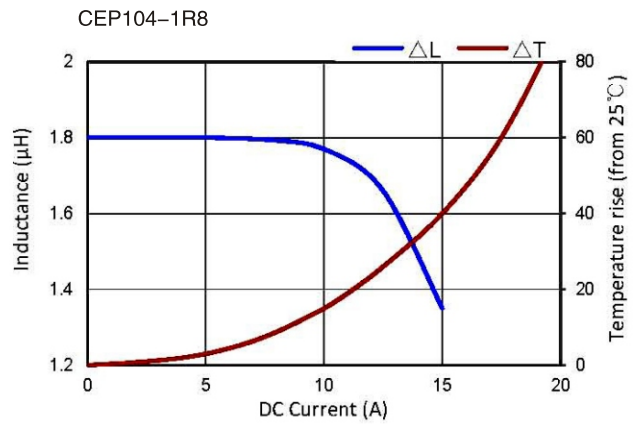
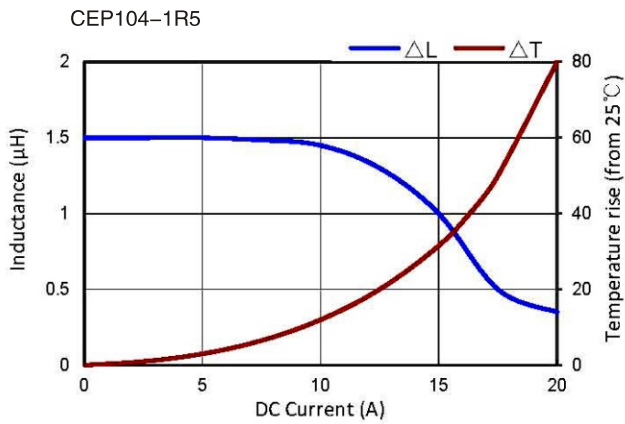
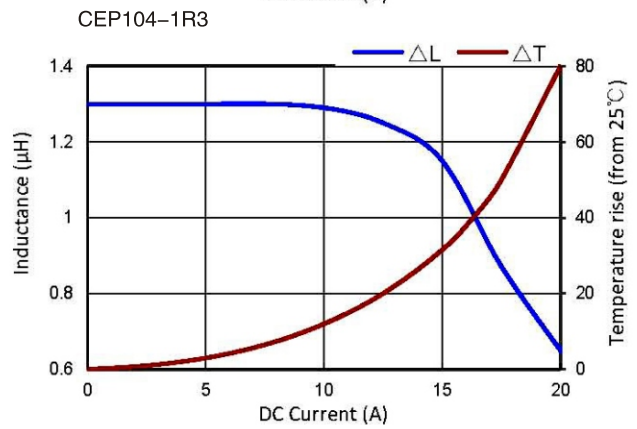
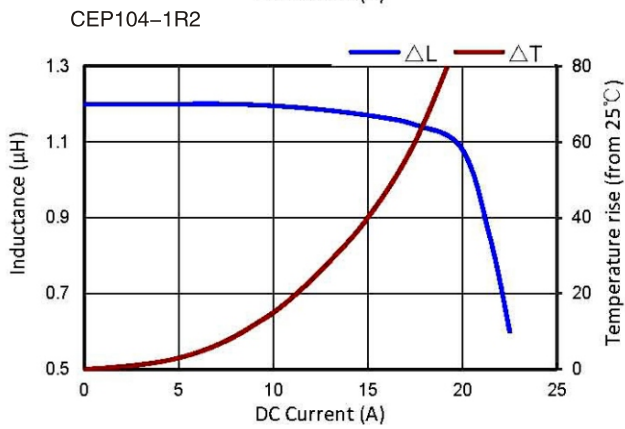
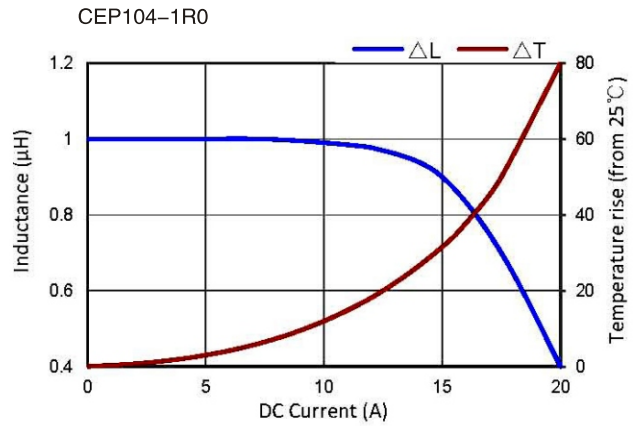
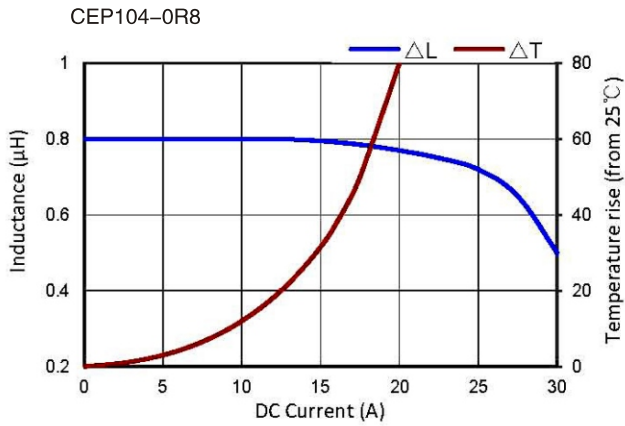
Dimensions(mm)



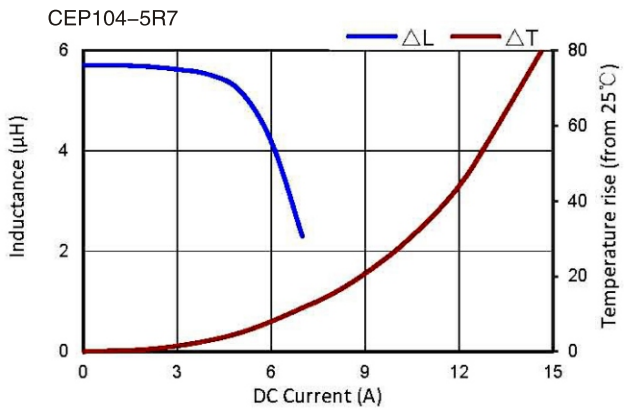
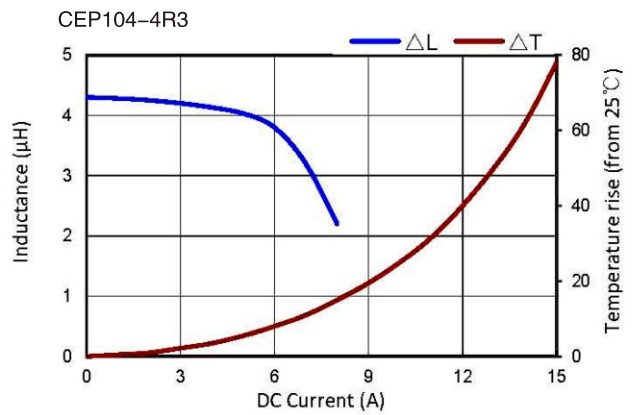
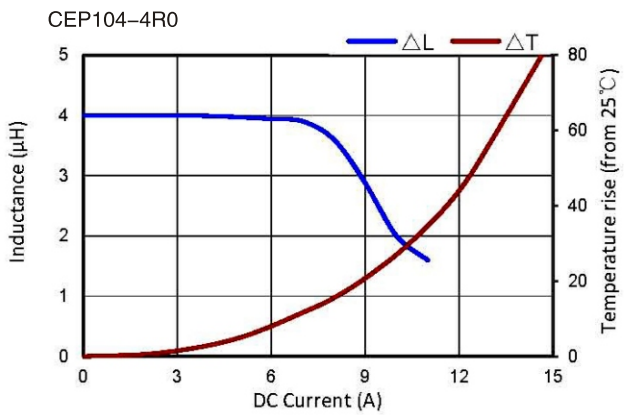
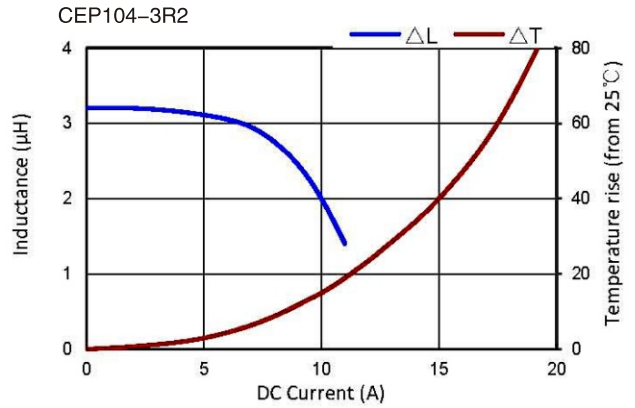
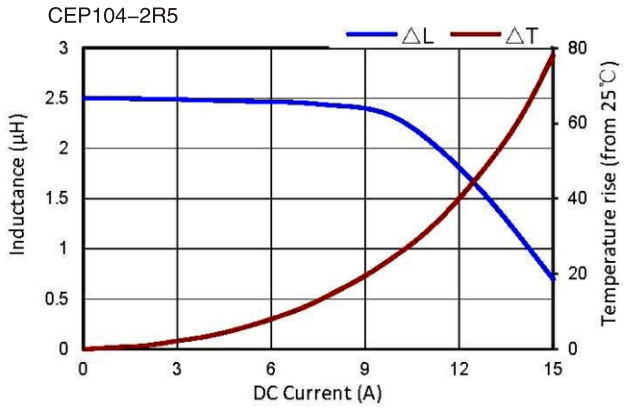
LAND PATTERNS

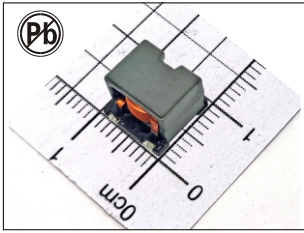
- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:



ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 105 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

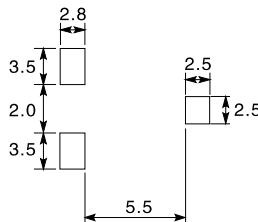
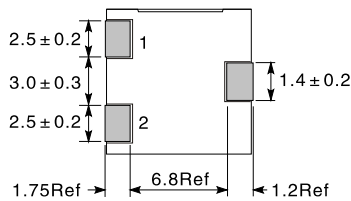
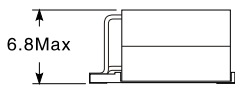
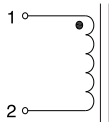
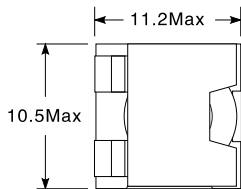
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)Max	DC saturation current			Temperature rise 40°C current (A)Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP105-5R6	5.6	10.5	4.0	7.8	10.5	8.5
CEP105-6R8	6.8	12.0	3.5	6.8	9.8	7.8
CEP105-9R0	9.0	16.0	3.2	5.7	9.1	6.6
CEP105-100	10.0	18.8	3.0	5.5	9.0	6.0
CEP105-120	12.0	21.0	2.4	5.0	7.2	5.2
CEP105-150	15.0	26.5	2.0	4.2	6.5	4.6
CEP105-220	22.0	40.0	2.0	3.0	5.2	4.0

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

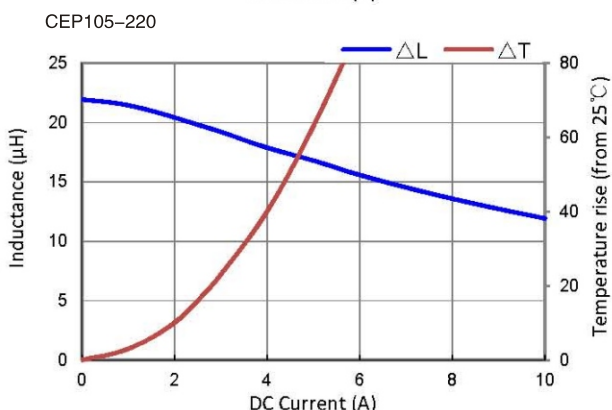
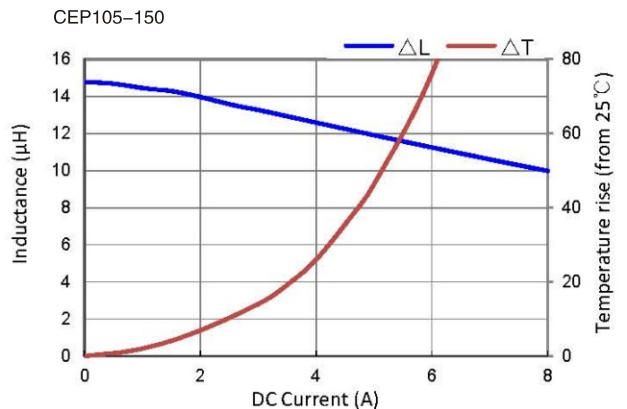
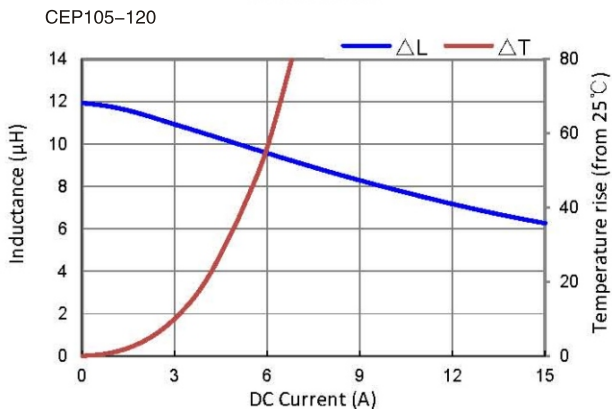
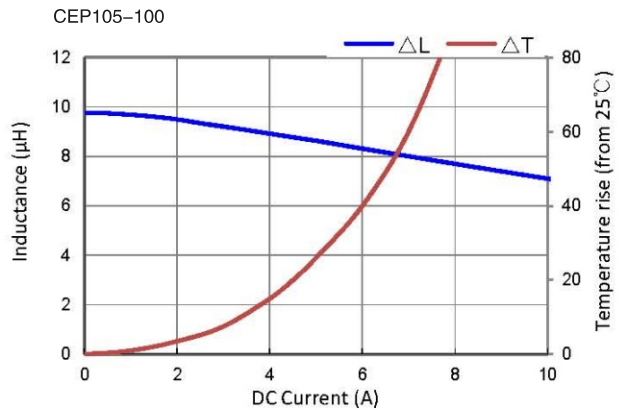
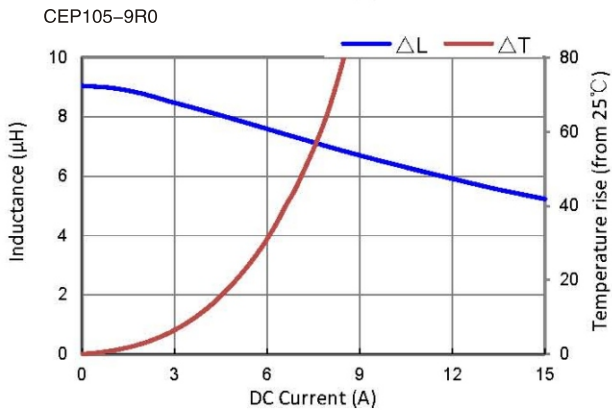
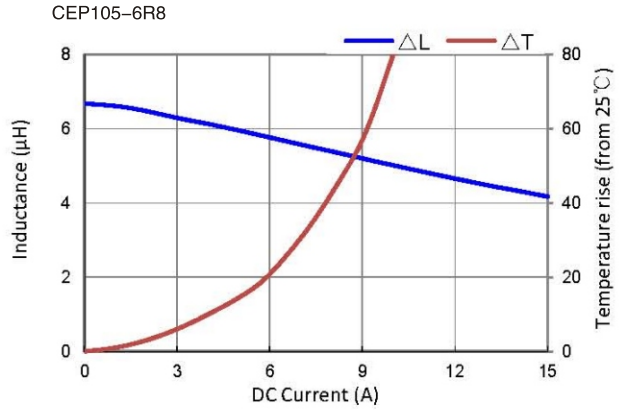
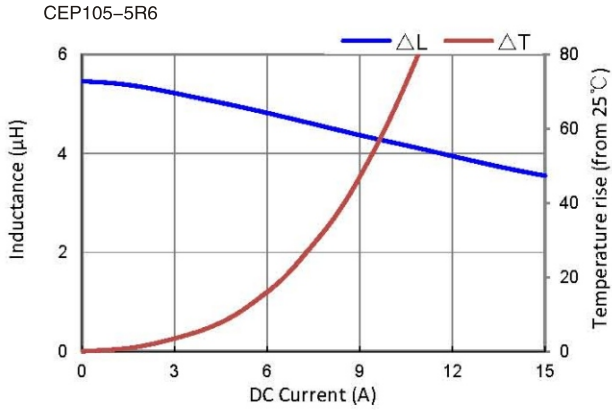
Dimensions(mm)

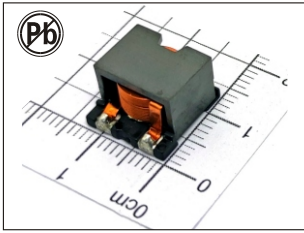


LAND PATTERNS

- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 136 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

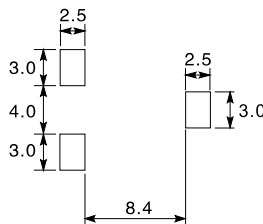
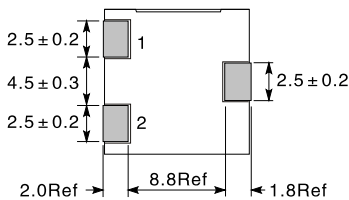
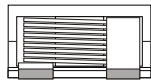
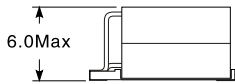
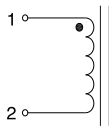
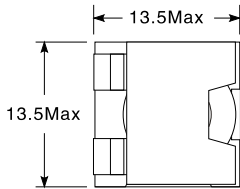
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)Max	DC saturation current			Temperature rise 40°C current (A)Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP136-1R0	1.0	2.6	32	33	33.5	13
CEP136-2R2	2.2	2.6	15	17	18	13
CEP136-2R7	2.7	2.6	12	13	14	13
CEP136-3R3	3.3	6.0	11.5	12.5	13.5	9.4
CEP136-4R7	4.7	6.0	9.5	11	12	9.4
CEP136-6R8	6.8	6.0	8.0	9	9.5	9.4
CEP136-8R2	8.2	10.8	7.5	8.5	9	7.6
CEP136-100	10	10.8	6.2	7	7.5	7.6

TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

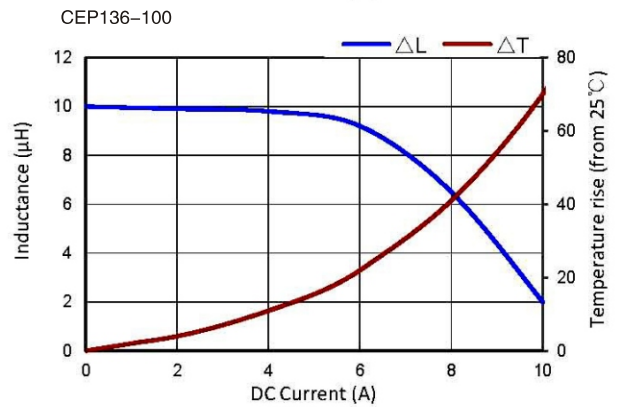
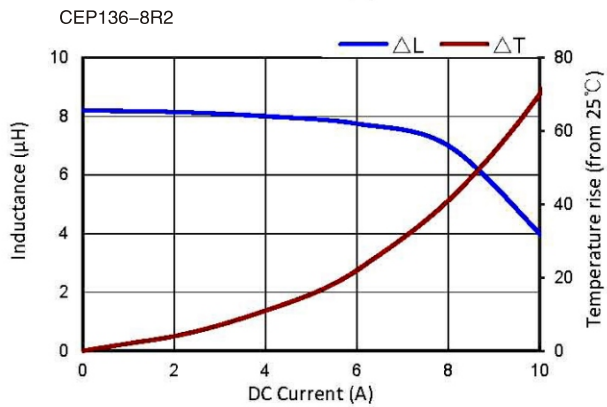
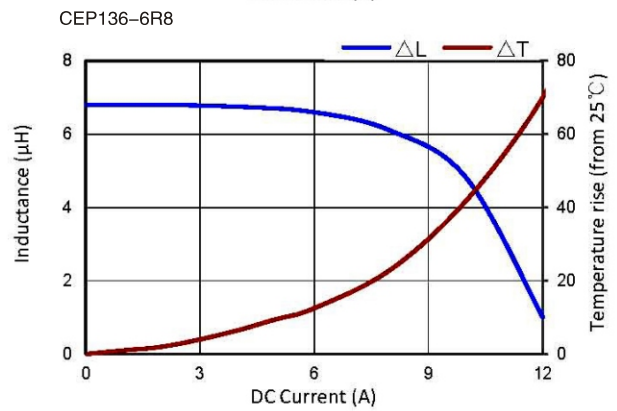
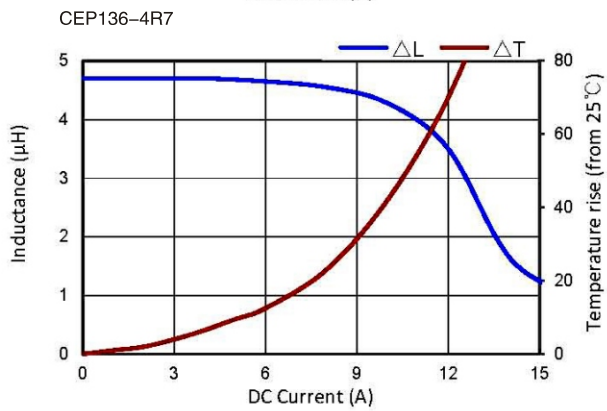
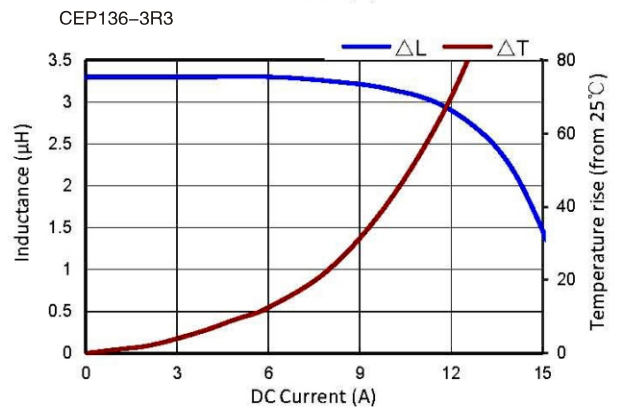
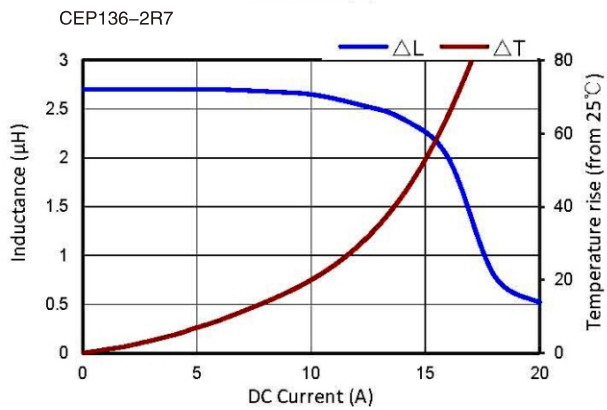
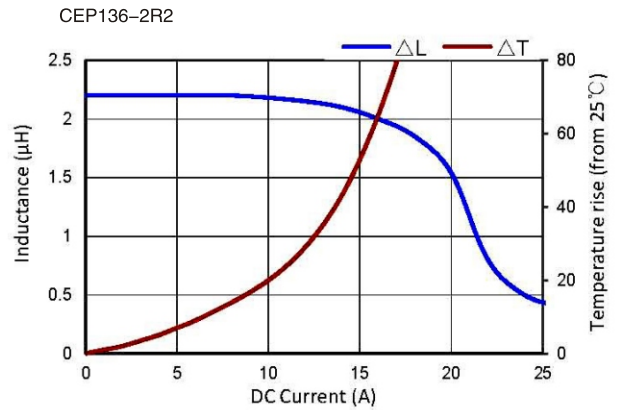
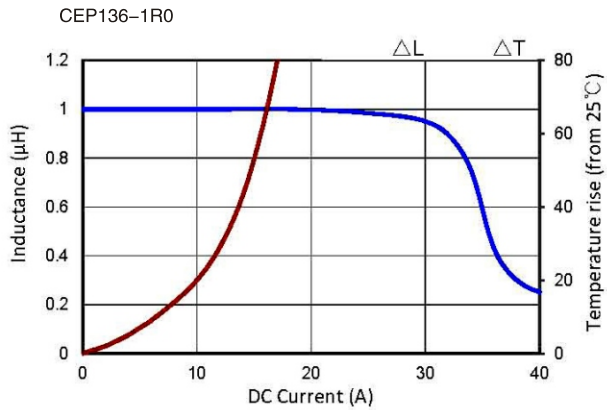
Dimensions(mm)

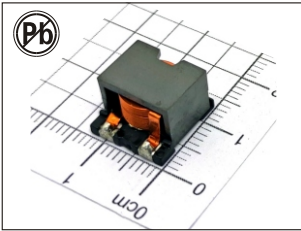


LAND PATTERNS

- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.

ELECTRICAL CHARACTERISTIC CURVE:





HIGH CURRENT POWER INDUCTORS

CEP 139 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

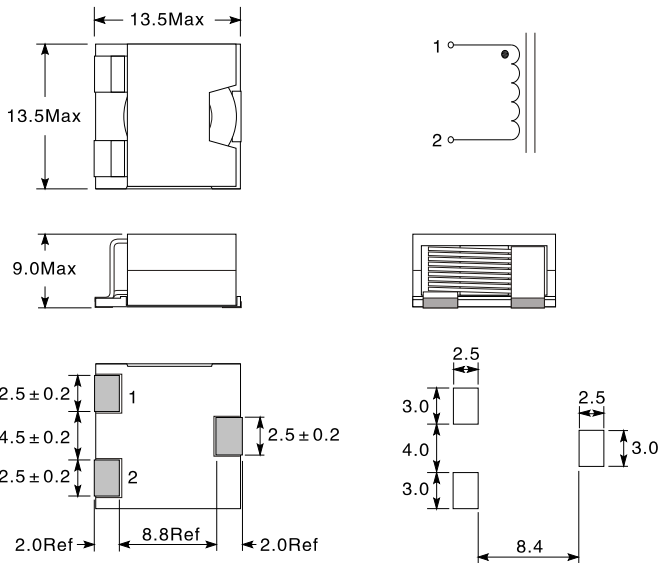
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

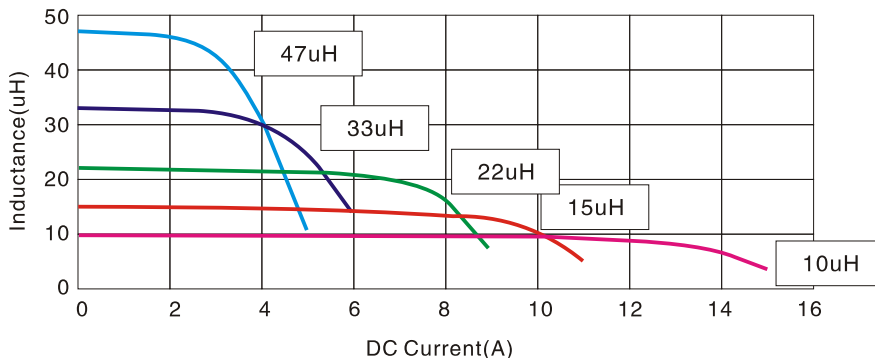
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			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP139-100	10	15	11.4	12.6	13.2	9.2
CEP139-150	15	15	7.2	8.1	8.7	9.2
CEP139-220	22	23	6.1	6.8	7.4	7.7
CEP139-330	33	23	3.8	4.4	4.8	7.7
CEP139-470	47	23	2.6	3.0	3.2	7.7

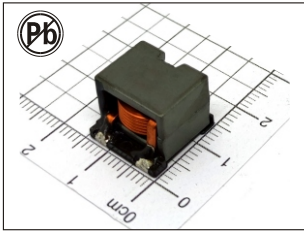
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 1412 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

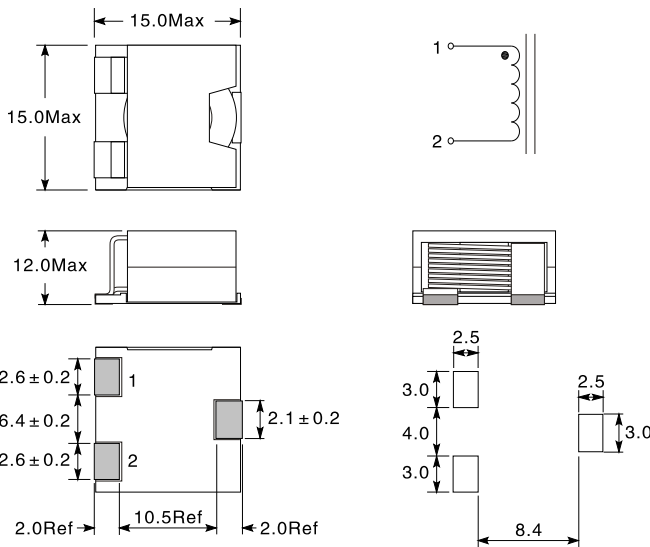
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

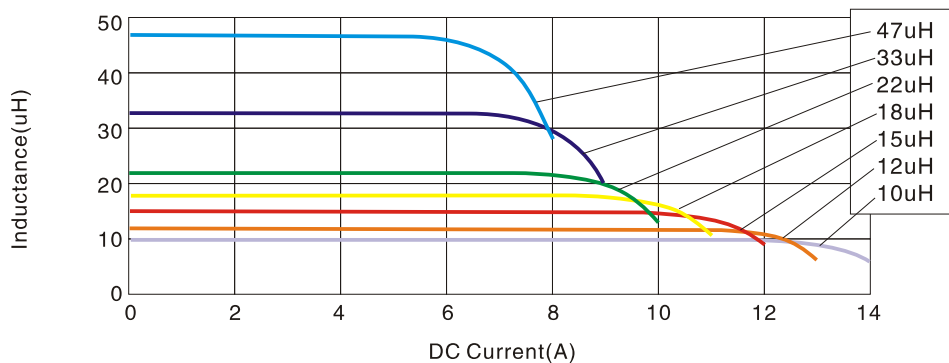
Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)	DC saturation current			Temperature rise 40°C current (A)Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP1412-100	10	7.98	11.9	13.1	13.5	10.1
CEP1412-120	12	9.42	10.7	11.8	12.5	9.7
CEP1412-150	15	10.8	9.8	10.9	11.6	9.1
CEP1412-180	18	12.6	9.1	10.0	10.5	8.4
CEP1412-220	22	15.2	7.9	8.8	9.4	7.8
CEP1412-330	33	17.9	7.0	7.9	8.6	7.1
CEP1412-470	47	17.9	6.0	6.9	7.4	6.5

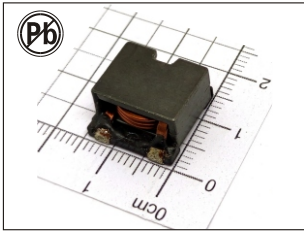
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 148 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

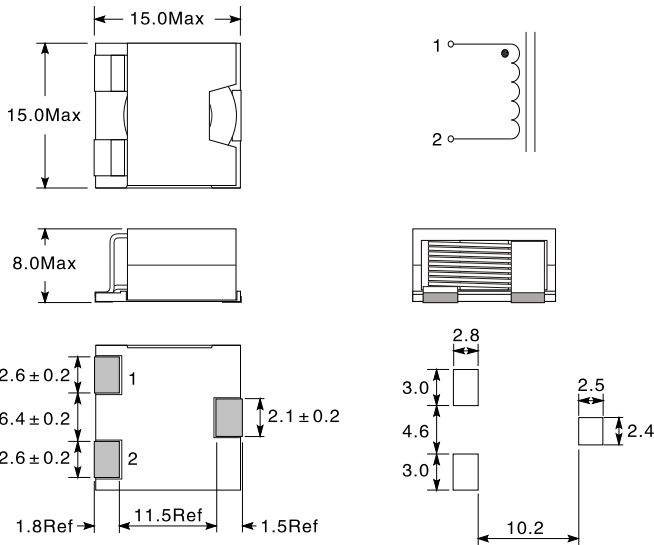
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

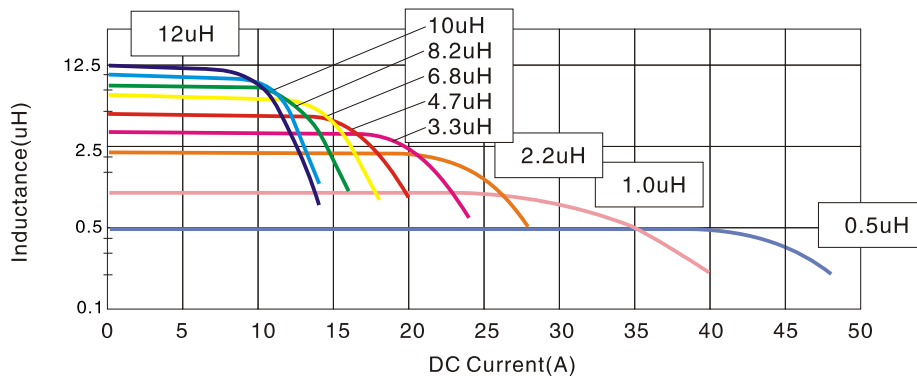
Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)	DC saturation current			Temperature rise 40°C current (A)Max
			L0 Drop 10% Max	L0 Drop 20% Max	L0 Drop 30% Max	
CEP148-0R5	0.5	1.2	39.0	42.0	43.0	23
CEP148-1R0	1.0	1.2	25.4	28.0	29.2	23
CEP148-2R2	2.2	2.0	19.0	21.0	21.8	20
CEP148-3R3	3.3	3.3	15.0	17.0	18.0	17.5
CEP148-4R7	4.7	5.0	12.0	14.0	15.0	16
CEP148-6R8	6.8	6.0	10.2	12.0	12.8	12.5
CEP148-8R2	8.2	7.8	9.0	10.0	10.7	11
CEP148-100	10.0	9.8	8.5	9.5	10.2	10
CEP148-120	12.0	13.0	7.5	8.5	9.2	8.5

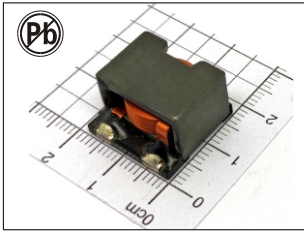
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.





HIGH CURRENT POWER INDUCTORS

CEP 1812 SERIES

FEATURES:

- Compact size using flat wire, and SMD type
- Low radiation noise by magnetically shielded construction
- High current
- Low resistance

COMMON APPLICATIONS:

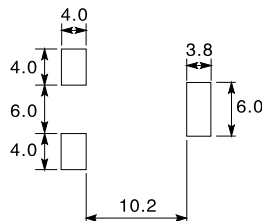
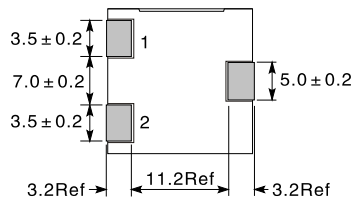
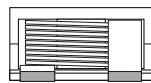
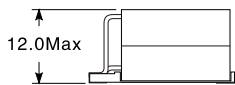
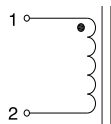
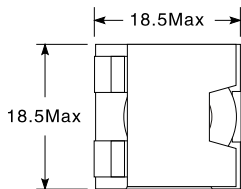
- High efficiency DC/DC converters
- Single and polyphase buck converters
- Filter for audio applications
- Optimized for high current boost applications

ELECTRICAL CHARACTERISTICS:

Part No.	Inductance @ 100KHz (uH) ± 20%	DCR (mΩ)Max	DC saturation current L0 Drop 25% Max	Temperature rise 40°C current (A)Max
CEP1812-5R6	5.6	2.00	12.0	22.5
CEP1812-8R2	8.2	2.42	10.8	19.5
CEP1812-120	12	3.29	9.0	18.0
CEP1812-150	15	4.33	8.0	16.5
CEP1812-220	22	5.60	6.8	16.0
CEP1812-270	27	7.92	6.7	12.5
CEP1812-330	33	8.94	5.5	12.0

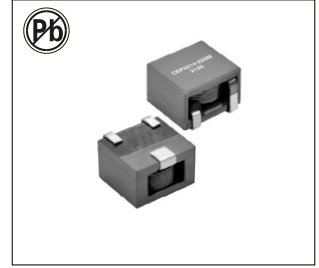
TECHNICAL INFORMATION & PHYSICAL CHARACTERISTICS:

Dimensions(mm)



- Test Frequency : 100KHz / 0.25V
- Testing Instrument : L:HP4284A, CH11025, CH3302, CH1320, CH1320S LCR METER/Rdc:CH16502, Agilent33420A MICRO OHMMETER.
- The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions. Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.
- Operating Temperature & Storage Temperature: -40°C - +105°C.
- All specifications subject to change without notice.

SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES



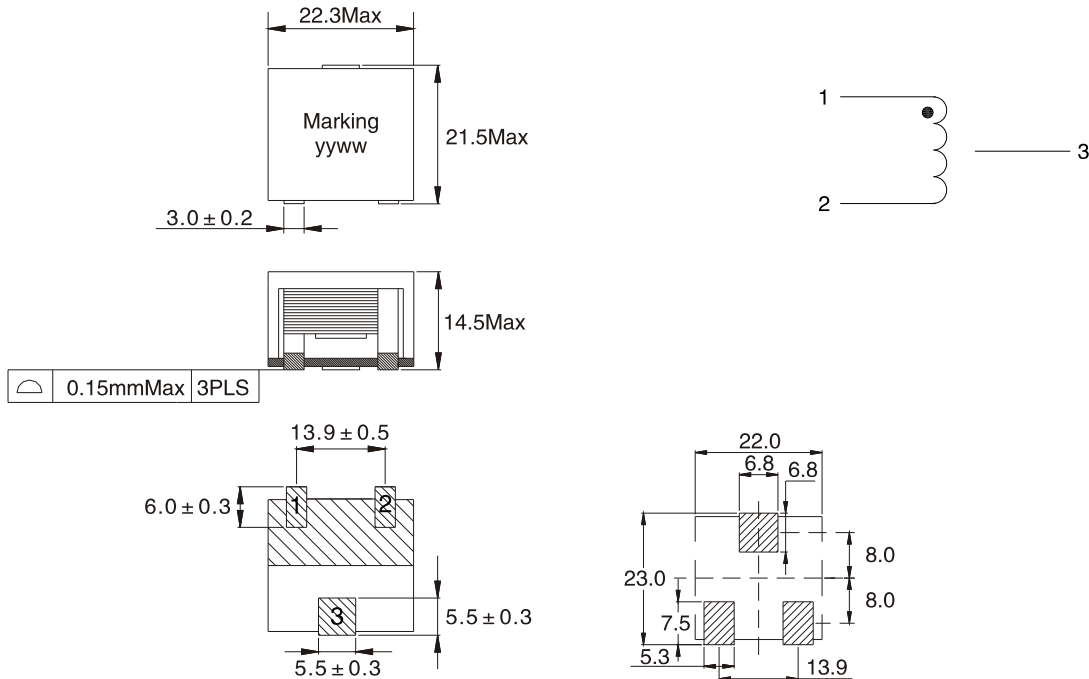
FEATURES:

- Magnetic shielding structure, excellent resistance to electromagnetic interference
- Flat wire winding, low ESR, small parasitic capacitance
- Additional terminal design structure, soldering firmly
- Compact design saves installation area
- Low power loss, suitable for applications of wide temperature and frequency range

ELECTRICAL CHARACTERISTICS:@25°C

Part Number	Inductance (uH) ± 20%	DCR (mΩ) Max	Saturation current Isat(A)	Temperature rise current Irms(A)
CEP2214-3R3M	3.3	1.87	52	36.5
CEP2214-6R8M	6.8	1.87	27	36.5
CEP2214-120M	12.0	4.32	23.2	23.5
CEP2214-220M	22.0	4.32	12.5	23.5
CEP2214-330M	33.0	12.6	13.5	12.8
CEP2214-470M	47.0	12.6	10	12.8

PHYSICAL CHARACTERISTICS: WINDING:

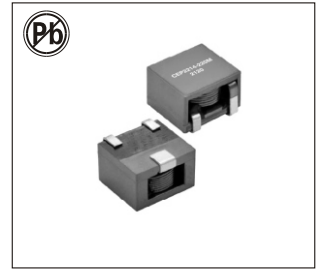


GENERAL SPECIFICATIONS:

- All data is tested based on 25 °C ambient temperature
- Inductance measure condition at 100kHz, 1.0V.
- Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value
- Temperature rise current: the actual value of DC current when the temperature rise is Δ T40 °C (Ta=25 °C)
- Special remind:Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application
- Operating temperature : -40 °C to +125 °C (Including coil's temperature rise)

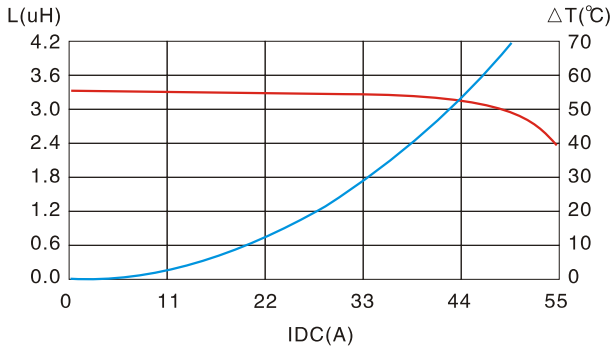
Note:All specifications subject to change without notice.

SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES

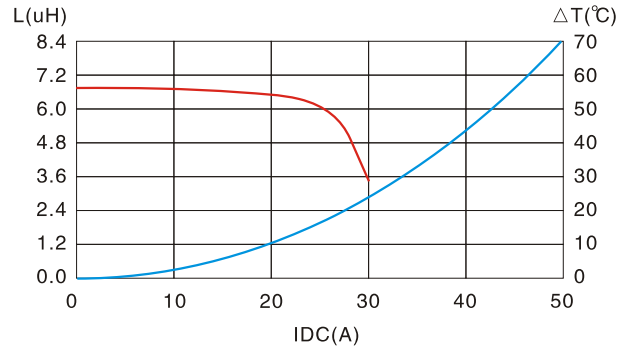


SATURATION CURRENT VS TEMPERATURE RISE CURRENT CURVE

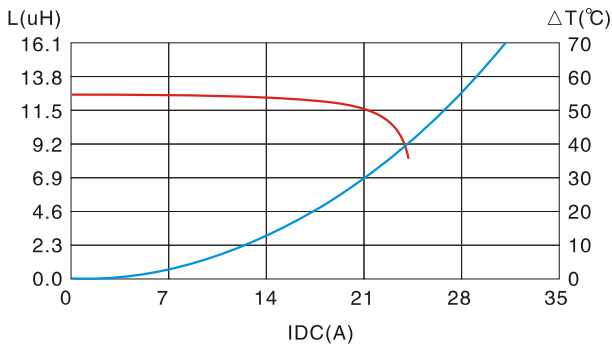
CEP2214-3R3M



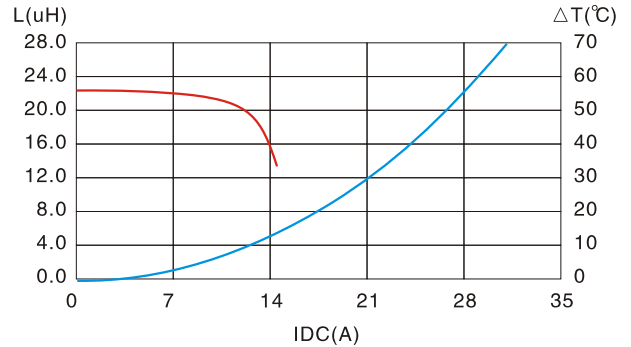
CEP2214-6R8M



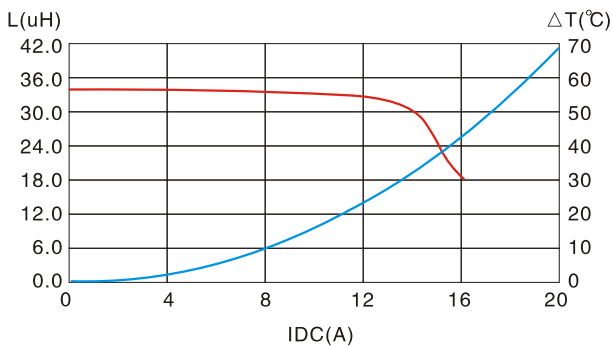
CEP2214-120M



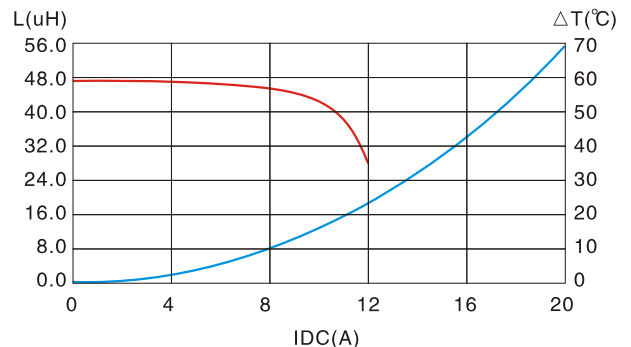
CEP2214-220M



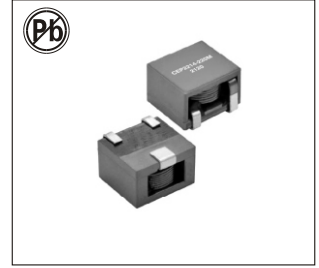
CEP2214-330M



CEP2214-470M

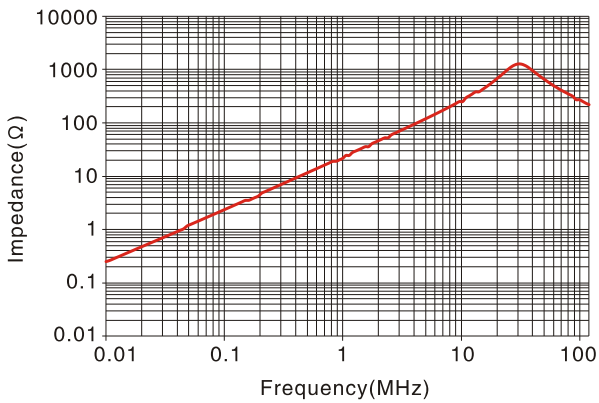


SMD HIGH CURRENT POWER INDUCTOR CEP2214 SERIES

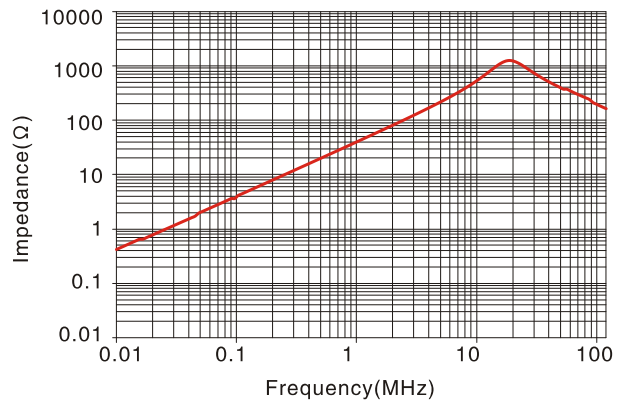


IMPEDANCE VS FREQUENCY

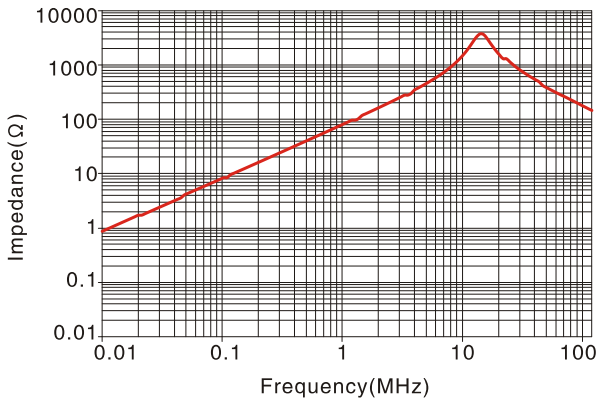
CEP2214-3R3M



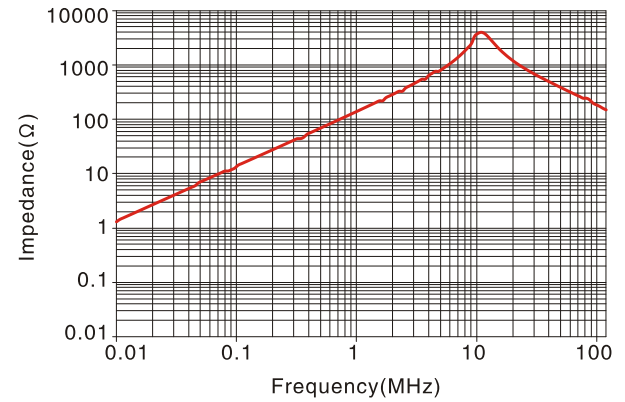
CEP2214-6R8M



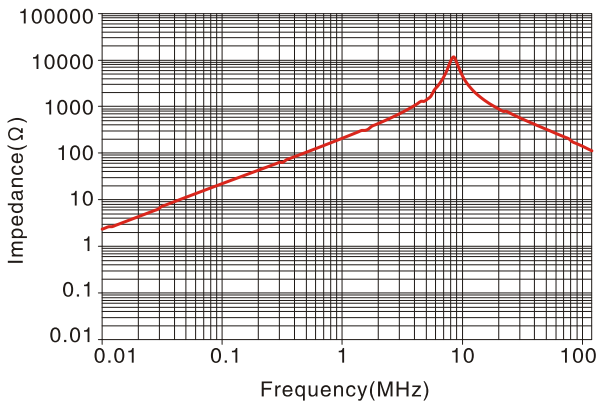
CEP2214-120M



CEP2214-220M



CEP2214-330M



CEP2214-470M

