COMPOSITE FORMING SMD INDUCTORS

CETC-A TYPE

Features

- RoHS compliant* and halogen free**
- lowest DCR/uH,in this package size.
- High saturation current
- Frequency range up to 1.0MHZ.
- Ultra low buzz noise,due to composite construction.

Applications

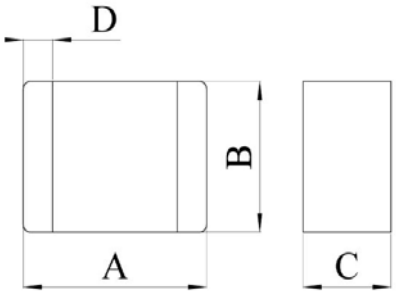
- Notebook/Desktop/Server applications.
- low profile,high current power supplies.
- Battery powered devices.
- DC/DC converters.

Product identification

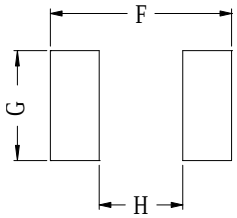
CETC XXXX - XXX M - A
① ② ③ ④ ⑤

① Product Code	② Size: L×W (mm)	③ Inductance Value
④ Tolerance: J±5%, K±10%, L±15% , M±20%, P± 25%, N±30%		⑤ Category

Product Dimensions(02) [unit: mm]



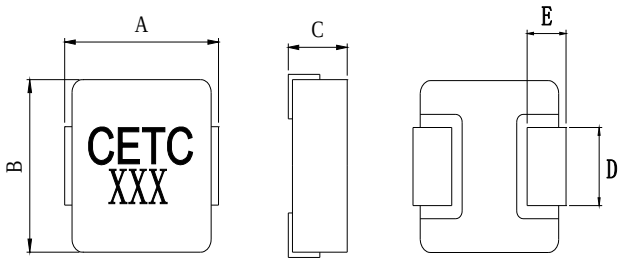
Recommended Layout [unit: mm]

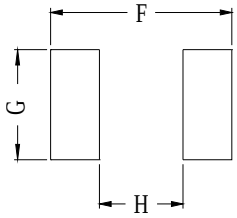


型 号	A	B	C	D	F	G	H
CETC 02010	2.0± 0.2	1.6± 0.2	1.0Max	0.5 ± 0.3	2.3	1.6	0.9

Product Dimensions(03、04、05) [unit: mm]

Recommended Layout [unit: mm]

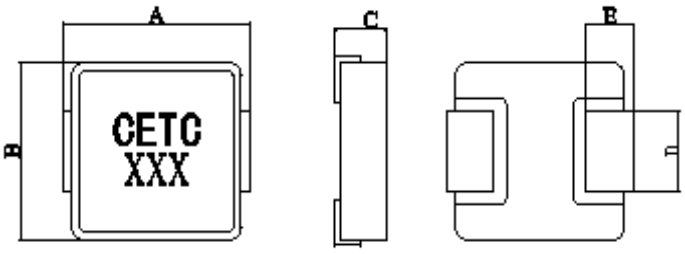


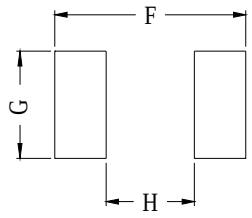


型号	A	B	C	D	E	F	G	H
CETC 0315	3.6Max	3.0± 0.2	1.5Max	0.6 ± 0.2	0.76± 0.3	4.2	1.2	1.2
CETC 0320	3.6Max	3.0± 0.2	2.0Max	0.6 ± 0.2	0.76± 0.3	4.2	1.2	1.2
CETC 0420	4.45± 0.25	4.06± 0.25	2.0Max	1.5 ± 0.5	0.76± 0.3	5.2	2.5	2.2
CETC 0530	5.8 Max	5.18± 0.25	3.0Max	2.2 ± 0.3	1.2 ± 0.3	5.99	2.5	2.5

Product Dimensions(06、10、12) [unit: mm]

Recommended Layout [unit: mm]





型号	A	B	C	D	E	F	G	H
CETC 0618	7.4 Max	6.6± 0.2	1.8Max	3.0 ± 0.3	1.6 ± 0.4	8.0	3.6	3.6
CETC 0624	7.4 Max	6.6± 0.2	2.4Max	3.0 ± 0.3	1.6 ± 0.4	8.0	3.6	3.6
CETC 0630	7.4 Max	6.6± 0.2	3.0Max	3.0 ± 0.3	1.6 ± 0.4	8.0	3.6	3.6
CETC 1030	11.5 Max	10± 0.5	3.1Max	3.0 ± 0.5	2.2 ± 0.4	13.6	4.1	5.4
CETC 1040	11.5 Max	10± 0.5	4.0Max	3.0 ± 0.5	2.2 ± 0.4	13.6	4.1	5.4
CETC 1250	14 Max	12.6± 0.2	5.0Max	3.8± 0.3	2.0± 0.5	14.5	5.0	8.0
CETC 1270	14 Max	12.6± 0.2	7.0Max	3.8± 0.3	2.0± 0.5	14.5	5.0	8.0

Specification table

CETC02010-A series

P/N	1MHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±30% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 02010-R68 N-A	0.68	52	65	2.5	2.6
CETC 02010-1R0 N-A	1	65	70	2.1	2.5
CETC 02010-1R5 N-A	1.5	115	140	1.8	2
CETC 02010-2R2 N-A	2.2	140	150	1.3	1.6

CETC0315-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0315-R22 M-A	0.22	10	12	8.5	12
CETC 0315-R33 M-A	0.33	12.5	15	7.8	9
CETC 0315-R47 M-A	0.47	19	22	5	6.5
CETC 0315-R56 M-A	0.56	23	27	5	7
CETC 0315-2R2 M-A	2.2	85	97	2	3.5

CETC0320-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0320-R33 M-A	0.33	14	17	5.5	8.3
CETC 0320-R47 M-A	0.47	18	22	4.8	8
CETC 0320-R68 M-A	0.68	22	27	4.5	6
CETC 0320-1R0 M-A	1.0	28	32	4	5
CETC 0320-1R5 M-A	1.5	34	40	3.7	4.5
CETC 0320-2R2 M-A	2.2	67	80	3	4.3
CETC 0320-3R3 M-A	3.3	99	114	2.2	4.2
CETC 0320-4R7 M-A	4.7	132	152	2.5	3.5
CETC 0320-6R8 M-A	6.8	168	193	1.6	2.85

- All test data is referenced to 25°C ambient
- DC current (Idc) that will cause an approximate △ T of 40℃
- DC current (Isat) that will cause Lo to drop approximately 30%
- Operating temperature Range: –40°C to +85°C

CETC0420-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0420-R10 M-A	0.1	3.5	4.0	12	22
CETC 0420-R22 M-A	0.22	6.00	6.6	9.5	12
CETC 0420-R47 M-A	0.47	12.5	14	7.5	12
CETC 0420-R56 M-A	0.56	14	16	7.5	10
CETC 0420-R68 M-A	0.68	18	20.0	7.5	9
CETC 0420-1R0 M-A	1.0	24.0	27	6	7
CETC 0420-1R5 M-A	1.5	38	46.0	5	6
CETC 0420-2R2 M-A	2.2	52	58.0	4	5
CETC 0420-3R3 M-A	3.3	74	87.0	3	4
CETC 0420-4R7 M-A	4.7	92	110	2.5	3.5
CETC 0420-6R8 M-A	6.8	160	175	2.4	2.8
CETC 0420-8R2 M-A	8.2	200	215	2	2
CETC 0420-100 M-A	10	256	286	1.6	2

CETC0530-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0530-R20 M-A	0.2	3.5	3.90	14	15
CETC 0530-R47 M-A	0.47	7.4	8.5	11	13
CETC 0530-R68 M-A	0.68	11	12	9	12
CETC 0530-1R0 M-A	1.0	13	14	9	11
CETC 0530-1R5 M-A	1.5	20	25	8.5	9
CETC 0530-2R2 M-A	2.2	25	29	6.5	7
CETC 0530-3R3 M-A	3.3	32.0	38	5	6
CETC 0530-4R7 M-A	4.7	50	60	4.5	5
CETC 0530-6R8 M-A	6.8	75	90	3.5	4
CETC 0530-100 M-A	10	110	125	3.2	3.5

CETC0618-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0618-R10 M-A	0.1	2.8	3.20	18	40
CETC 0618-R15 M-A	0.15	3.0	3.5	15	38
CETC 0618-R22 M-A	0.22	3.8	4.2	14	26
CETC 0618-R33 M-A	0.33	6	6.8	12	18
CETC 0618-R47 M-A	0.47	7.3	8.4	11	17
CETC 0618-R68 M-A	0.68	12.7	13.9	9	16
CETC 0618-R82 M-A	0.82	13.8	15.9	8	15
CETC 0618-1R0 M-A	1.0	17.5	18.3	7	12
CETC 0618-1R5 M-A	1.5	22.6	34.0	4	10
CETC 0618-2R2 M-A	2.2	40.3	46.0	3.75	7
CETC 0618-3R3 M-A	3.3	56.2	60	3.25	6
CETC 0618-4R7 M-A	4.7	89	99	3	6

CETC0624-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0624-R10 M-A	0.1	1.5	1.7	30	50
CETC 0624-R22 M-A	0.22	2.9	3.2	21	34
CETC 0624-R33 M-A	0.33	3.2	3.55	18	35
CETC 0624-R47 M-A	0.47	5.4	6.0	13.5	22
CETC 0624-R68 M-A	0.68	7.3	8.1	11	18
CETC 0624-R82 M-A	0.82	8.5	9.35	11	18
CETC 0624-1R0 M-A	1.0	11.5	12.5	9	16
CETC 0624-1R5 M-A	1.5	18	20.6	7.5	16
CETC 0624-2R2 M-A	2.2	23	25	7	14
CETC 0624-3R3 M-A	3.3	28.5	31.5	6	6
CETC 0624-4R7 M-A	4.7	53	63	5	8
CETC 0624-6R8 M-A	6.8	68	76	3.5	4.5
CETC 0624-100 M-A	10	112	125	2.5	3.5

CETC0630-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 0630-1R0 M-A	1.0	7.0	8	14	14.5
CETC 0630-1R5 M-A	1.5	10.2	12.0	13	14
CETC 0630-2R2 M-A	2.2	15.6	18.0	8.2	8.4
CETC 0630-3R3 M-A	3.3	23.5	26.0	8.5	9.5
CETC 0630-4R7 M-A	4.7	29.5	33.4	6	6.5
CETC 0630-6R8 M-A	6.8	41	46.8	5	6
CETC 0630-8R2 M-A	8.2	52.5	54.9	5.5	5.7
CETC 0630-100 M-A	10	64	68	4	5
CETC 0630-150 M-A	15	108	118	3	3.5
CETC 0630-220 M-A	22	128	135	2.8	3.2

CETC1030-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 1030-R16 M-A	0.16	0.85	0.95	36	60
CETC 1030-R30 M-A	0.30	1.55	1.7	28	55
CETC 1030-R47 M-A	0.47	2	2.2	28	45
CETC 1030-R56 M-A	0.56	2.5	2.75	25	30
CETC 1030-R68 M-A	0.68	2.8	3.1	25	28
CETC 1030-1R0 M-A	1.0	4.5	4.95	25	28
CETC 1030-1R5 M-A	1.5	7.0	7.8	13.5	25
CETC 1030-2R2 M-A	2.2	8.3	10	14	20
CETC 1030-3R3 M-A	3.3	13.5	15	9	15
CETC 1030-4R7 M-A	4.7	21	24.0	9	12
CETC 1030-6R8 M-A	6.8	32	36	7	12
CETC 1030-100 M-A	10	46	52	7	10

CETC1040-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 1040-R33 M-A	0.33	1.06	1.2	25	50
CETC 1040-R47 M-A	0.47	1.5	1.68	24	35
CETC 1040-R56 M-A	0.56	2.1	2.4	23.5	33
CETC 1040-R68 M-A	0.68	2.3	3.0	20	30
CETC 1040-1R0 M-A	1.0	3.0	4	18	28
CETC 1040-1R5 M-A	1.5	3.7	5.5	12	24
CETC 1040-2R2 M-A	2.2	7.2	9.0	12	18
CETC 1040-3R3 M-A	3.3	10.8	11.8	10	16
CETC 1040-4R7 M-A	4.7	17	20	8.5	13
CETC 1040-6R8 M-A	6.8	18.8	25	7	10
CETC 1040-8R2 M-A	8.2	24.3	27	6	9
CETC 1040-100 M-A	10	17.5	30	5.5	8.5
CETC 1040-150 M-A	15	40	45	4.5	7
CETC 1040-220 M-A	22	60	66	4	5.5

CETC1250-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 1250-R33 M-A	0.33	0.7	1.1	41	60
CETC 1250-R47 M-A	0.47	1.0	1.3	39	52
CETC 1250-R68 M-A	0.68	1.3	1.5	32	40
CETC 1250-1R0 M-A	1.0	1.9	2.2	26	35
CETC 1250-1R5 M-A	1.5	2.7	3.2	23	30
CETC 1250-2R2 M-A	2.2	4	5.0	15	26
CETC 1250-3R3 M-A	3.3	7	9	13	22
CETC 1250-4R7 M-A	4.7	9	11	12	17
CETC 1250-5R6 M-A	5.6	13	15	11	16
CETC 1250-6R8 M-A	6.8	15	18	10	14
CETC 1250-100 M-A	10	20	23	8	12
CETC 1250-150 M-A	15	28	32	5	10
CETC 1250-220 M-A	22	45	52	4.5	7

CETC1270-A series

P/N	100KHz 0.25V	D.C.R (mΩ)		Heat Rating Current	Saturation Current
	L0(μH) ±20% '@0A	Typical	Max	Idc (Amp) Typical	Isat (Amp) Typical
CETC 1270-R47 M-A	0.47	1.0	1.2	33	60
CETC 1270-R56 M-A	0.56	1.2	1.4	35	60
CETC 1270-R68 M-A	0.68	1.4	1.6	32	50
CETC 1270-1R0 M-A	1.0	1.7	2.0	30	49
CETC 1270-2R2 M-A	2.2	3.5	4.2	22	40
CETC 1270-3R3 M-A	3.3	5.7	6.8	18	32
CETC 1270-3R6 M-A	3.6	6.3	7	16	30
CETC 1270-4R7 M-A	4.7	8	8.7	13.5	28
CETC 1270-6R8 M-A	6.8	12	13.5	11.5	25
CETC 1270-100 M-A	10	15.5	17	9	16
CETC 1270-150 M-A	15	31	34	6	9
CETC 1270-220 M-A	22	46	50	6	8
CETC 1270-330 M-A	33	75	81	5	8
CETC 1270-470 M-A	47	85	90	4.5	6

• All test data is referenced to 25°C ambient

• DC current (Idc) that will cause an approximate △ T of 40℃

• DC current (Isat) that will cause Lo to drop approximately 30%

• Operating temperature Range: –55°C to +125°C

• The part temperature (ambient + temp rise) should not exceed125℃ under the worst operating conditions. Circuit design,component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

http://www.ecthf.com