

■ Features

- Magnetically shielded construction, low DC resistance
- The use of magnetic iron powder ensure capability for large current
- Low audible core noise
- Ideal for DC-DC converter applications in land held personal computer and etc.
- Frequency Range: up to 30MHZ
- ROHS compliant

■ Applications

- Smart phone MID
- Next-generation mobile devices with multifunction such as adding color TV and digital movie cameras
Flat-screen TVs, blue-ray disc recorders set top box
- Notebook, desktop computers servers graphic cards
- Portable gaming devices, personal navigation systems, personal multimedia devise
- Automotive systems
- Telecom base stations

■ Lead free part numbering

ETC	0630	H	100	M	T	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(1) Series Type

(2) Dimension A*C

(3) Material code H S

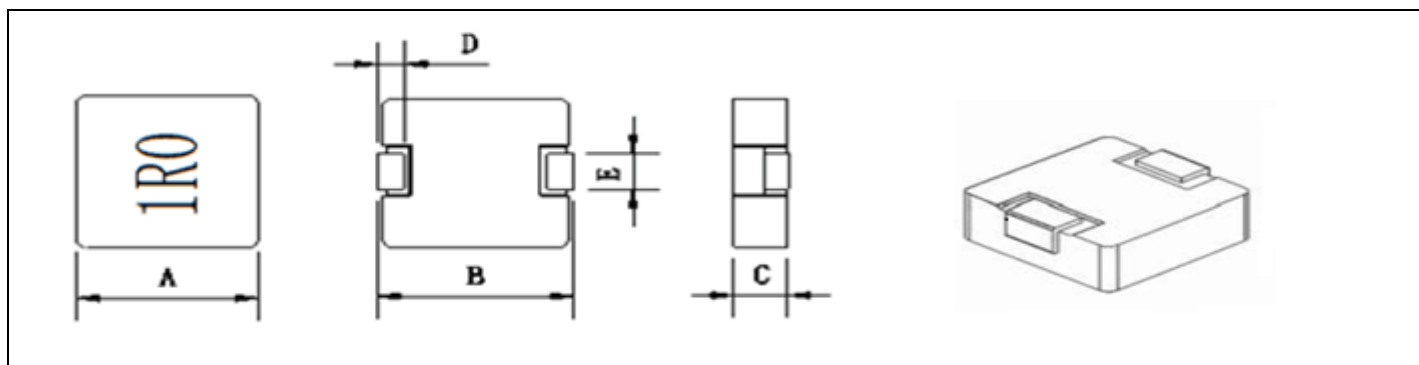
(4) Inductance 2R2=2.2UH 100=10UH 101=100UH

(5) Inductance tolerance M=+/-20% N=+/-30% K=+/-10%

(6) Company code

(7) Packaging packed in embossed carrier tape

■ Dimensions



Size	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)
0415	4.06±0.30	4.49±0.40	1.5MAX	1.1±0.3	1.5±0.3
0420	4.06±0.30	4.49±0.40	2.0MAX	1.1±0.3	1.5±0.3
0515	5.3MAX	5.6±0.3	1.5MAX	1.2±0.3	2.0±0.3
0520	5.3MAX	5.6±0.3	2.0MAX	1.2±0.3	2.0±0.3
0530	5.3MAX	5.6±0.3	3.0MAX	1.2±0.3	2.0±0.3
0618	6.6±0.3	7.6MAX	1.8MAX	1.6±0.5	3.0±0.3
0620	6.6±0.3	7.6MAX	2.0MAX	1.6±0.5	3.0±0.3
0624	6.6±0.3	7.6MAX	2.4MAX	1.6±0.5	3.0±0.3
0630	6.6±0.3	7.6MAX	3.0MAX	1.6±0.5	3.0±0.3
0640	6.6±0.3	7.6MAX	4.0MAX	1.6±0.5	3.0±0.3
0650	6.6±0.3	7.6MAX	5.0MAX	1.6±0.5	3.0±0.3
1030	10.8MAX	11.8MAX	3.0MAX	2.0±0.5	3.0±0.3
1040	10.8MAX	11.8MAX	4.0MAX	2.0±0.5	3.0±0.3
1050	10.8MAX	11.8MAX	5.0MAX	2.0±0.5	3.0±0.3
1235	12.8±0.5	13.5±1.0	3.5MAX	2.5±0.5	3.5±0.5
1240	12.8±0.5	13.5±1.0	4.0MAX	2.5±0.5	3.5±0.5
1250	12.8±0.5	13.5±1.0	5.0MAX	2.5±0.5	3.5±0.5
1265	12.8±0.5	13.5±1.0	6.5MAX	2.5±0.5	3.5±0.5
1770	17.5MAX	19.0MAX	7.0MAX	3.3±0.5	11.7±0.3

This description in the this catalogue is subject to change without notice

■ Specification

ETC0415

Series	Standard Values - Case Size 0415 (4.0 x 4.5 x 1.5mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0415SR47M**	0.47	8.0	10.0	17.0	20.0
ETC0415SR68M**	0.68	6.0	8.0	19.0	22.0
ETC0415S1R0M**	1.0	5.0	7.0	40.0	45.0
ETC0415S2R2M**	2.2	3.5	5.0	92.0	100.0
ETC0415S3R3M**	3.3	2.5	3.0	105.0	120.0
ETC0415S4R7M**	4.7	2.0	2.5	120.0	140.0
ETC0415S100M**	10.0	0.5	0.8	240.0	260.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0420

Series	Standard Values - Case Size 0420 (4.0 x 4.5 x 2.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0420SR10M**	0.10	12.0	23.0	3.5	4.5
ETC0420SR22M**	0.22	11.0	18.0	5.0	7.0
ETC0420SR33M**	0.33	8.0	15.0	8.2	10.5
ETC0420SR47M**	0.47	7.0	9.5	9.5	14.0
ETC0420SR56M**	0.56	6.5	9.0	12.0	18.0
ETC0420SR68M**	0.68	6.0	8.0	15.0	20.0
ETC0420S1R0M**	1.0	4.5	7.0	25.0	30.0
ETC0420S1R5M**	1.5	4.0	6.0	33.0	36.0
ETC0420S2R2M**	2.2	3.0	5.0	50.0	58.0
ETC0420S3R3M**	3.3	2.5	3.0	83.0	87.0
ETC0420S4R7M**	4.7	2.2	3.0	115.0	140.0
ETC0420S6R8M**	6.8	2.4	2.5	130.0	175.0
ETC0420S100M**	10.0	1.5	1.8	170.0	200.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0515

Series	Standard Values - Case Size 0515 (5.3 x 5.5 x 1.5mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (mΩ)	
				TYP.	MAX.
ETC0515SR22M**	0.22	13.0	16.0	5.1	7.0
ETC0515SR47M**	0.47	8.0	12.0	12.0	16.0
ETC0515SR68M**	0.68	7.0	9.0	14.0	20.0
ETC0515S1R0M**	1.0	6.0	8.0	18.0	23.0
ETC0515S2R2M**	2.2	4.0	5.0	56.0	65.0
ETC0515S3R3M**	3.3	3.0	4.0	75.0	90.0
ETC0515S4R7M**	4.7	2.5	3.5	110.0	135.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0520

Series	Standard Values - Case Size 0520 (5.3 x 5.5 x 2.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (mΩ)	
				TYP.	MAX.
ETC0520SR22M**	0.22	11.0	16.5	4.6	6.0
ETC0520SR33M**	0.33	10.0	15.0	7.5	9.0
ETC0520SR47M**	0.47	9.0	12.0	8.2	10.0
ETC0520SR68M**	0.68	7.0	11.0	12.5	16.0
ETC0520S1R0M**	1.0	7.0	8.0	17.0	19.2
ETC0520S1R5M**	1.5	5.0	7.0	21.0	28.0
ETC0520S2R2M**	2.2	4.0	6.0	31.0	45.0
ETC0520S3R3M**	3.3	3.5	5.0	58.0	70.0
ETC0520S4R7M**	4.7	3.0	3.5	66.0	85.0
ETC0520S6R8M**	6.8	2.0	3.0	95.0	100.0
ETC0520S100M**	10.0	1.8	2.5	170.0	190.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0530

Series	Standard Values - Case Size 0530 (5.3 x 5.5 x 3.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0530SR22M**	0.22	14.0	17.0	4.0	5.0
ETC0530SR47M**	0.47	10.0	13.0	8.0	11.0
ETC0530SR68M**	0.68	9.0	12.0	9.0	12.0
ETC0530S1R0M**	1.0	7.0	11.0	14.0	16.0
ETC0530S1R5M**	1.5	5.5	10.0	17.0	22.0
ETC0530S2R2M**	2.2	5.0	9.0	27.0	30.0
ETC0530S3R3M**	3.3	4.5	7.0	33.0	38.0
ETC0530S4R7M**	4.7	4.0	5.0	45.0	60.0
ETC0530S6R8M**	6.8	2.5	3.5	77.0	90.0
ETC0530S100M**	10.0	2.0	3.0	110.0	130.0
ETC0530S150M**	15.0	1.8	2.0	145.0	165.0
ETC0530S220M**	22.0	1.5	1.5	200.0	230.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0618

Series	Standard Values - Case Size 0618 (6.6 x 7.6 x 1.8mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0618SR10M**	0.1	18.0	35.0	2.5	3.5
ETC0618SR22M**	0.22	14.0	27.0	3.8	5.2
ETC0618SR33M**	0.33	12.0	22.0	5.6	6.8
ETC0618SR47M**	0.47	11.0	18.0	7.2	8.4
ETC0618SR68M**	0.68	9.0	17.0	9.5	12.0
ETC0618S1R0M**	1.0	7.0	11.0	17.0	22.0
ETC0618S1R5M**	1.5	6.5	10.0	23.0	30.0
ETC0618S2R2M**	2.2	6.0	9.0	31.0	36.0
ETC0618S3R3M**	3.3	4.0	8.0	65.0	70.0
ETC0618S4R7M**	4.7	3.5	5.0	73.0	85.0
ETC0618S6R8M**	6.8	2.8	3.5	100.0	110.0
ETC0618S100M**	10.0	2.3	2.5	115.0	150.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0620

Series	Standard Values - Case Size 0620 (6.6 x 7.6 x 2.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0620SR10M**	0.1	18.0	35.0	2.5	3.5
ETC0620SR22M**	0.22	14.0	27.0	3.8	5.2
ETC0620SR33M**	0.33	12.0	22.0	5.6	6.8
ETC0620SR47M**	0.47	11.0	18.0	7.2	8.4
ETC0620SR68M**	0.68	9.0	17.0	9.5	12.0
ETC0620S1R0M**	1.0	7.0	11.0	17.0	22.0
ETC0620S1R5M**	1.5	6.5	10.0	23.0	30.0
ETC0620S2R2M**	2.2	6.0	9.0	31.0	36.0
ETC0620S3R3M**	3.3	4.0	8.0	65.0	70.0
ETC0620S4R7M**	4.7	3.5	5.0	73.0	85.0
ETC0620S6R8M**	6.8	2.8	3.5	100.0	110.0
ETC0620S100M**	10.0	2.3	2.5	115.0	150.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0624

Series	Standard Values - Case Size 0620 (6.6 x 7.6 x 2.4mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0624SR22M**	0.22	20.0	34.0	2.2	2.8
ETC0624SR33M**	0.33	18.0	24.0	3.0	4.1
ETC0624SR47M**	0.47	15.0	21.0	5.6	6.8
ETC0624SR68M**	0.68	9.0	20.0	7.0	8.0
ETC0624S1R0M**	1.0	8.0	13.0	9.0	12.0
ETC0624S1R5M**	1.5	7.0	12.0	15.0	20.0
ETC0624S2R2M**	2.2	6.0	11.0	22.0	28.0
ETC0624S3R3M**	3.3	5.5	8.5	25.0	30.0
ETC0624S4R7M**	4.7	5.0	8.0	55.0	65.0
ETC0624S6R8M**	6.8	3.0	5.0	80.0	90.0
ETC0624S100M**	10.0	3.0	4.0	100.0	125.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0630

Series	Standard Values - Case Size 0620 (6.6 x 7.6 x 3.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0630SR10M**	0.1	32.5	60.0	1.2	1.7
ETC0630SR15M**	0.15	30.0	40.0	2.0	2.5
ETC0630SR22M**	0.22	23.0	34.0	2.7	3.5
ETC0630SR33M**	0.33	21.0	25.0	3.2	3.9
ETC0630SR47M**	0.47	17.5	25.0	3.7	4.5
ETC0630SR68M**	0.68	14.0	23.0	4.8	5.5
ETC0630SR82M**	0.82	13.0	20.0	6.8	7.0
ETC0630S1R0M**	1.0	11.0	16.0	7.5	9.0
ETC0630S1R5M**	1.5	10.0	14.0	11.0	15.0
ETC0630S2R2M**	2.2	8.0	12.0	15.0	20.0
ETC0630S3R3M**	3.3	6.0	10.0	25.0	30.0
ETC0630S4R7M**	4.7	5.5	9.0	37.0	40.0
ETC0630S5R6M**	5.6	5.0	8.0	50.0	60.0
ETC0630S6R8M**	6.8	5.0	7.0	50.0	60.0
ETC0630S8R2M**	8.2	4.0	6.0	75.0	80.0
ETC0630S100M**	10.0	3.0	5.5	78.0	90.0
ETC0630S150M**	15.0	2.8	4.0	110.0	130.0
ETC0630S220M**	22.0	2.5	3.5	127.0	150.0
ETC0630S330M**	33.0	1.8	2.0	218.0	245.0
ETC0630S470M**	47.0	0.8	1.8	255.0	290.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0640

Series	Standard Values - Case Size 0620 (6.6 x 7.6 x 4.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0640SR22M**	0.22	23.0	35.0	2.5	3.0
ETC0640SR33M**	0.33	21.0	25.0	2.8	3.5
ETC0640SR47M**	0.47	17.0	23.0	3.7	4.5
ETC0640SR68M**	0.68	14.0	20.0	4.2	5.5
ETC0640S1R0M**	1.0	10.0	18.0	5.5	7.0
ETC0640S1R5M**	1.5	9.0	15.0	9.0	12.0
ETC0640S2R2M**	2.2	8.0	12.0	10.0	13.0
ETC0640S3R3M**	3.3	6.5	11.0	17.0	20.0
ETC0640S4R7M**	4.7	6.0	9.0	22.0	25.0
ETC0640S6R8M**	6.8	5.0	8.0	41.0	45.0
ETC0640S8R2M**	8.2	4.0	7.0	46.0	52.0
ETC0640S100M**	10.0	3.5	6.0	53.0	65.0
ETC0640S150M**	15.0	3.0	4.5	70.0	80.0
ETC0640S220M**	22.0	2.5	4.0	100.0	120.0
ETC0640S330M**	33.0	2.0	3.0	165.0	200.0
ETC0640S470M**	47.0	1.5	2.0	220.0	260.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC0650

Series	Standard Values - Case Size 0620 (6.6 x 7.6 x 5.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC0650SR15M**	0.15	36.0	45.0	0.8	1.0
ETC0650SR22M**	0.22	25.0	45.0	2.3	3.0
ETC0650SR33M**	0.33	23.0	35.0	2.8	3.5
ETC0650SR47M**	0.47	18.0	24.0	3.5	4.5
ETC0650SR68M**	0.68	14.0	21.0	4.2	5.5
ETC0650SR82M**	0.82	14.0	20.0	5.5	7.0
ETC0650S1R0M**	1.0	12.0	18.0	6.5	7.5
ETC0650S1R5M**	1.5	10.0	15.0	7.0	8.5
ETC0650S2R2M**	2.2	8.0	12.0	10.5	13.0
ETC0650S3R3M**	3.3	7.0	11.0	14.0	20.0
ETC0650S4R7M**	4.7	7.0	10.0	21.0	25.0
ETC0650S6R8M**	6.8	5.0	7.0	24.0	28.0
ETC0650S8R2M**	8.2	4.5	8.0	37.0	45.0
ETC0650S100M**	10.0	4.0	7.0	45.0	60.0
ETC0650S150M**	15.0	3.5	5.0	62.0	70.0
ETC0650S220M**	22.0	3.0	4.0	80.0	90.0
ETC0650S330M**	33.0	2.5	3.0	180.0	220.0
ETC0650S470M**	47.0	2.0	2.8	195.0	240.0
ETC0650S560M**	56.0	1.5	2.5	210.0	260.0
ETC0650S680M**	68.0	1.3	1.8	265.0	310.0
ETC0650S101M**	100.0	0.8	1.6	495.0	550.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1030

Series	Standard Values - Case Size 1030 (10.8 x 11.8x 3.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1030SR36M**	0.36	23.0	35.0	1.4	1.6
ETC1030SR56M**	0.56	18.0	24.0	1.5	1.7
ETC1030SR68M**	0.68	17.0	23.0	2.6	3.2
ETC1030S1R0M**	1.0	13.0	18.0	5.0	7.0
ETC1030S1R5M**	1.5	10.0	16.0	7.0	9.0
ETC1030S2R2M**	2.2	9.0	14.0	10.0	12.0
ETC1030S3R3M**	3.3	7.0	9.0	15.0	20.0
ETC1030S4R7M**	4.7	6.0	8.5	20.0	25.0
ETC1030S6R8M**	6.8	5.0	7.0	33.0	40.0
ETC1030S8R2M**	8.2	4.0	6.0	47.0	55.0
ETC1030S100M**	10.0	4.0	5.0	50.0	56.0
ETC1030S150M**	15.0	3.5	4.0	65.0	70.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1040

Series	Standard Values - Case Size 1040 (10.8 x 11.8x 4.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1040SR22M**	0.22	30.0	60.0	0.8	1.1
ETC1040SR36M**	0.36	28.0	50.0	1.1	1.4
ETC1040SR47M**	0.47	25.0	35.0	1.2	1.5
ETC1040SR56M**	0.56	23.0	33.0	1.5	1.7
ETC1040SR68M**	0.68	22.0	32.0	1.8	2.3
ETC1040SR82M**	0.82	20.0	30.0	2.3	2.5
ETC1040S1R0M**	1.0	18.0	28.0	3.2	4.1
ETC1040S1R5M**	1.5	16.0	25.0	4.8	5.8
ETC1040S2R2M**	2.2	12.0	24.0	7.2	9.0
ETC1040S3R3M**	3.3	11.0	16.0	10.0	13.5
ETC1040S4R7M**	4.7	8.0	13.0	13.5	16.5
ETC1040S5R6M**	5.6	7.0	12.0	18.0	22.0
ETC1040S6R8M**	6.8	6.0	11.0	23.0	28.0
ETC1040S8R2M**	8.2	5.5	10.0	27.0	30.0
ETC1040S100M**	10.0	5.0	9.0	31.0	36.5
ETC1040S150M**	15.0	4.5	7.0	39.0	45.0
ETC1040S220M**	22.0	4.0	6.0	55.0	60.0
ETC1040S330M**	33.0	3.5	5.0	127.0	145.0
ETC1040S470M**	47.0	3.0	4.0	127.0	145.0
ETC1040S680M**	68.0	2.5	3.5	200.0	215.0
ETC1040S101M**	100.0	2.0	3.0	242.0	280.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1050

Series	Standard Values - Case Size 1050 (10.8 x 11.8x 5.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1050SR36M**	0.36	38.0	55.0	0.9	1.1
ETC1050SR47M**	0.47	36.0	50.0	1.1	1.3
ETC1050SR68M**	0.68	25.0	40.0	1.6	2.0
ETC1050SR82M**	0.82	20.0	34.0	2.0	2.5
ETC1050S1R0M**	1.0	19.0	30.0	2.3	2.7
ETC1050S1R5M**	1.5	18.0	25.0	3.9	4.6
ETC1050S2R2M**	2.2	17.0	20.0	4.7	5.5
ETC1050S3R3M**	3.3	10.0	16.0	5.8	7.0
ETC1050S4R7M**	4.7	9.0	15.0	10.0	13.0
ETC1050S6R8M**	6.8	8.0	13.0	17.0	22.0
ETC1050S8R2M**	8.2	7.0	11.0	22.0	25.0
ETC1050S100M**	10.0	6.0	10.0	23.0	28.0
ETC1050S150M**	15.0	5.0	8.0	39.0	45.0
ETC1050S220M**	22.0	4.5	7.0	55.0	60.0
ETC1050S330M**	33.0	4.0	6.0	90.0	100.0
ETC1050S470M**	47.0	3.5	5.0	127.0	145.0
ETC1050S680M**	68.0	3.0	5.0	215.0	258.0
ETC1050S101M**	100.0	2.5	4.0	230.0	270.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1235

Series	Standard Values - Case Size 1235 (12.8 x 13.5x 3.5mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1235SR22M**	0.22	35.0	60.0	0.9	1.2
ETC1235SR33M**	0.33	32.0	55.0	1.1	1.4
ETC1235SR47M**	0.47	30.0	50.0	1.3	1.5
ETC1235SR68M**	0.68	28.0	49.0	2.1	2.5
ETC1235S1R0M**	1.0	20.0	30.0	3.1	3.5
ETC1235S1R5M**	1.5	15.0	24.0	4.5	6.0
ETC1235S2R2M**	2.2	14.0	20.0	7.0	8.0
ETC1235S3R3M**	3.3	12.0	16.0	10.0	12.0
ETC1235S4R7M**	4.7	10.0	14.0	14.0	16.0
ETC1235S6R8M**	6.8	8.0	12.0	21.0	25.0
ETC1235S100M**	10.0	6.0	10.0	28.0	35.0
ETC1235S150M**	15.0	4.0	7.0	58.0	70.0
ETC1235S220M**	22.0	3.0	6.0	95.0	110.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1240

Series	Standard Values - Case Size 1240 (12.8 x 13.5x 4.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1240SR22M**	0.22	40.0	60.0	0.5	0.7
ETC1240SR33M**	0.33	38.0	55.0	0.7	0.9
ETC1240SR47M**	0.47	31.0	52.0	1.3	1.5
ETC1240SR68M**	0.68	28.0	49.0	2.1	2.5
ETC1240S1R0M**	1.0	20.0	38.0	2.9	3.5
ETC1240S1R5M**	1.5	16.0	30.0	3.6	4.5
ETC1240S2R2M**	2.2	15.0	22.0	6.5	8.0
ETC1240S3R3M**	3.3	14.0	20.0	8.7	10.0
ETC1240S4R7M**	4.7	9.0	15.0	12.0	14.0
ETC1240S5R6M**	5.6	8.0	14.0	15.0	17.0
ETC1240S6R8M**	6.8	7.0	12.0	17.0	22.0
ETC1240S100M**	10.0	6.0	10.0	28.0	35.0
ETC1240S150M**	15.0	5.0	9.0	55.0	65.0
ETC1240S220M**	22.0	4.0	7.0	69.0	80.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1250

Series	Standard Values - Case Size 1250 (12.8 x 13.5x 5.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1250SR22M	0.22	40.0	60.0	0.5	0.7
ETC1250SR36M	0.36	38.0	55.0	0.7	0.9
ETC1250SR47M	0.47	31.0	54.0	1.1	1.3
ETC1250SR68M	0.68	30.0	51.0	1.3	1.5
ETC1250SR82M	0.82	28.0	50.0	1.7	2.2
ETC1250S1R0M	1.0	25.0	50.0	2.1	2.5
ETC1250S1R5M	1.5	21.0	48.0	3.1	4.1
ETC1250S2R2M	2.2	16.0	25.0	3.3	4.5
ETC1250S3R3M	3.3	15.0	22.0	7.5	9.0
ETC1250S4R7M	4.7	12.0	20.0	10.0	12.0
ETC1250S6R8M	6.8	11.0	18.0	15.0	18.0
ETC1250S8R2M	8.2	10.0	16.0	19.0	23.0
ETC1250S100M	10.0	7.0	12.0	23.0	25.5
ETC1250S150M	15.0	6.0	9.0	26.0	30.0
ETC1250S220M	22.0	4.0	7.0	30.0	35.0
ETC1250S330M	33.0	3.0	6.0	52.0	60.0
ETC1250S470M	47.0	2.5	5.0	85.0	100.0
ETC1250S680M	68.0	2.0	3.5	154.0	180.0
ETC1250S101M	100.0	2.0	3.0	243.0	255.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1265

Series	Standard Values - Case Size 1265 (12.8 x 13.5x 6.5mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1265SR22M**	0.22	45.0	80.0	0.6	0.8
ETC1265SR36M**	0.36	38.0	70.0	0.8	1.0
ETC1265SR47M**	0.47	35.0	60.0	1.1	1.3
ETC1265SR68M**	0.68	30.0	54.0	1.2	1.5
ETC1265SR82M**	0.82	26.0	52.0	1.6	2.0
ETC1265S1R0M**	1.0	25.0	50.0	2.1	2.5
ETC1265S1R5M**	1.5	21.0	48.0	3.1	4.1
ETC1265S2R2M**	2.2	18.0	40.0	3.5	4.5
ETC1265S3R3M**	3.3	16.0	23.0	5.5	7.0
ETC1265S4R7M**	4.7	14.0	21.0	8.5	11.0
ETC1265S6R8M**	6.8	11.5	18.0	11.0	14.0
ETC1265S8R2M**	8.2	10.0	16.0	16.0	20.0
ETC1265S100M**	10.0	10.0	15.5	18.0	22.0
ETC1265S150M**	15.0	7.0	12.0	25.0	30.0
ETC1265S220M**	22.0	6.0	10.0	30.0	36.0
ETC1265S330M**	33.0	5.0	9.0	45.0	55.0
ETC1265S470M**	47.0	4.0	6.0	62.0	75.0
ETC1265S680M**	68.0	3.0	5.0	96.0	115.0
ETC1265S820M**	82.0	2.5	4.5	110.0	130.0
ETC1265S101M**	100.0	2.0	3.5	125.0	145.0
ETC1265S151M**	150.0	1.6	2.5	245.0	280.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

ETC1770

Series	Standard Values - Case Size 1770 (17.5 x 19.0x 7.0mm)				
	INDUCTANCE (UH)	HEAT RATING CURRENT(I dc) DC AMPS1 (Typ.)	SATURATION CURRENT(I sat) DC AMPS2 (Typ.)	RDC I sat (m Ω)	
				TYP.	MAX.
ETC1770SR22M	0.22	60.0	100.0	0.55	0.7
ETC1770SR33M	0.33	55.0	90.0	0.7	0.8
ETC1770SR47M	0.47	50.0	80.0	0.8	1.0
ETC1770SR56M	0.56	46.0	70.0	0.9	1.15
ETC1770SR82M	0.82	42.0	60.0	1.17	1.3
ETC1770S1R0M	1.0	38.0	50.0	1.45	1.7
ETC1770S1R5M	1.5	35.0	45.0	1.8	2.15
ETC1770S2R2M	2.2	25.0	34.0	2.15	2.6
ETC1770S3R3M	3.3	17.0	24.0	2.61	3.5
ETC1770S4R7M	4.7	15.0	21.0	3.38	5.0
ETC1770S6R8M	6.8	15.0	18.0	5.53	7.0
ETC1770S8R2M	8.2	12.0	18.0	7.0	9.0
ETC1770S100M	10.0	11.0	17.0	8.0	10.0
ETC1770S150M	15.0	9.0	12.0	12.0	15.0
ETC1770S220M	22.0	7.0	9.5	19.18	25.0
ETC1770S330M	33.0	6.5	9.0	30.65	35.0
ETC1770S470M	47.0	5.5	7.5	36.75	40.0
ETC1770S680M	68.0	4.0	5.0	61.0	80.0
ETC1770S820M	82.0	4.0	4.5	95.55	105.0
ETC1770S101M	100.0	3.0	4.0	111.0	120.0

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25°C ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40°C (keep 1min.).
4. Saturation Current (I sat) will cause L0 to drop 30% typical. (keep quickly).
5. Special inquiries besides the above common used types can be met on your requirement.

■ Reliability Testing

Item	Performance	Test Condition
Operating temperature	-55~+125°C	
Storage temperature	-10~+40°C, 50~60%RH (Product without taping)	

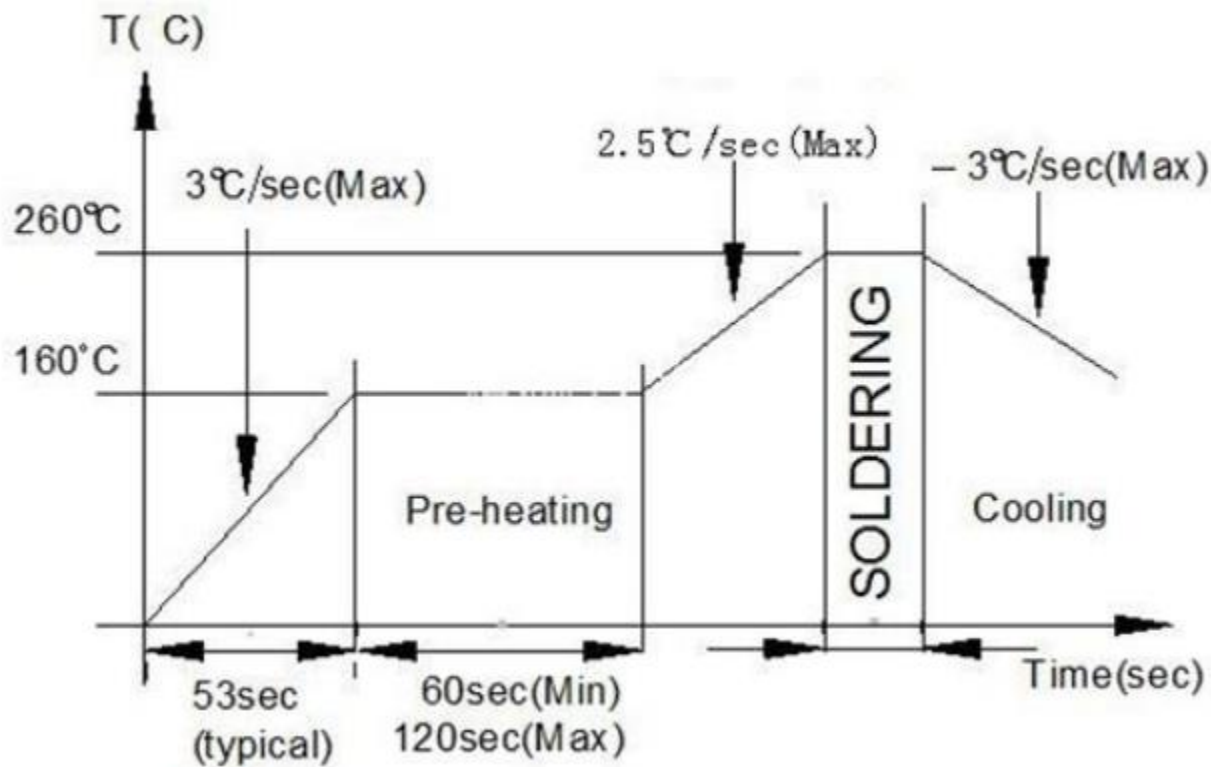
Electrical Performance Test

Inductance	Refer to standard electrical characteristics list.	HP4284A, CH11025, CH3302, CH1320, CH1320S
DCR		CH16502, Agilent33420A Micro-Ohm Meter.
Saturation Current (Isat)	ΔL 30% typical.	Saturation DC Current (Isat) will cause L0 to drop ΔL (%)(keep quickly).
Heat Rated Current (Irms)	Approximately $\Delta T \leq 40^\circ\text{C}$	Heat Rated Current (Irms) will cause the coil temperature rise ΔT (°C) without core loss.

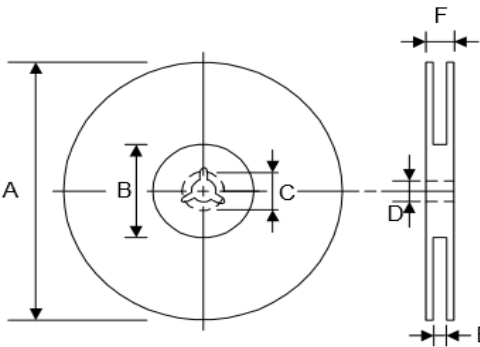
Reliability Test

High Temperature Exposure Test	Electric specifications should be satisfied	Temperature:125±2°C. Duration:1000±12hrs.
Low Temperature Life Test Low Temperature Life Test		Temperature:-40±2°C
Biased Humidity Test		Humidity:85±3%RH. Temperature:85±2°C. Duration:1000±12hrs.
Thermal shock test		Condition for 1 cycle Step1:-40+0 / -2°C 15±1 min. Step2:Room temperature within≤0.2 min. Step3:+125+2 / -0°C 15±1min.Number of cycles:300
Vibration test		Frequency: 10-2000-10Hz for 20min. Amplitude: Parts mounted within 2" from any secure point. Directions and times: X, Y,Z directions for 20 min.
Reflow test		Pre-heat: 150±5°C Duration: 5minutes Temperature: 260±5°C, 20~40 (IPC/JEDEC J STD-020C)
Solder test	Terminals should be covered by over 95% solder on visual inspection	After dip into flux, dip into solder 235±5°C, 4±1seconds Flux 、 solder for leadfree (ANSI /J-STD-002C Method B)

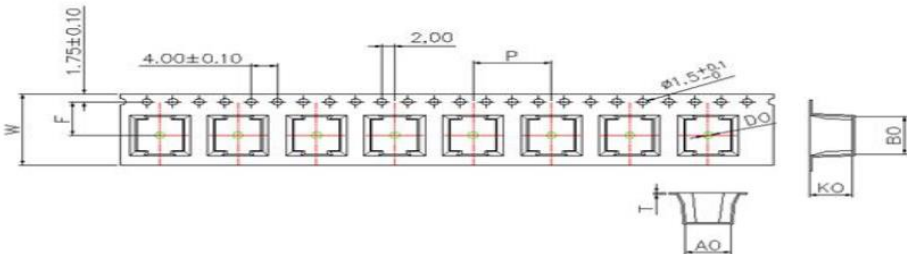
Soldering Condition Recommended



Reel Specifications



TYPE	A	B	C	D	E	F
12mm	330	100	21.0±0.8	13 ^{+0.5} _{-0.2}	16±0.3	18.4
16mm	330	100	21.0±0.8	13 ^{+0.5} _{-0.2}	16±0.3	22.4
24mm	330	100	21.0±0.8	13 ^{+0.5} _{-0.2}	24±0.3	30.4
32mm	330	100	21.0±0.8	13.0±0.1	32.0±0.5	36.0±2.0



TYPE	Q'TY (PCS)	A0	B0	KO	W	P	T
ETC0415	3000	5.2±0.1	4.4±0.1	1.6±0.1	12.0±0.3	8.0±0.1	0.30±0.05
ETC0420	3000	5.2±0.1	4.4±0.1	2.2±0.1	12.0±0.3	8.0±0.1	0.30±0.05
ETC0515	2500/3000	6.0±0.1	5.4±0.1	1.7±0.2	12.0±0.3	8.0±0.1	0.30±0.05
ETC0520	2500/3000	6.0±0.1	5.4±0.1	2.2±0.1	12.0±0.3	8.0±0.1	0.30±0.05
ETC0530	2000/2500	6.0±0.1	5.4±0.1	3.2±0.1	12.0±0.3	8.0±0.1	0.30±0.05
ETC0618	2000	7.0±0.1	7.8±0.1	2.2±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC0620	2000	7.0±0.1	7.8±0.1	2.2±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC0624	1500	7.0±0.1	7.8±0.1	2.6±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC0630	1000	7.0±0.1	7.8±0.1	3.2±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC0640	1000	7.0±0.1	7.8±0.1	4.2±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC0650	1000	7.0±0.1	7.8±0.1	5.2±0.1	16.0±0.3	12.0±0.1	0.35±0.05
ETC1030	1000	10.7±0.1	12.0±0.1	3.2±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1040	1000	10.7±0.1	12.0±0.1	4.5±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1050	500/800	10.7±0.1	12.0±0.1	5.2±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1235	800	13.3±0.3	14.8±0.3	3.8±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1240	800	13.3±0.3	14.8±0.3	4.3±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1250	500	13.3±0.3	14.8±0.3	5.3±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1265	500	13.3±0.3	14.8±0.3	6.8±0.1	24.0±0.3	16.0±0.1	0.35±0.05
ETC1770	400	17.1±0.2	17.5±0.2	7.2±0.1	32.0±0.5	24.0±0.1	0.40±0.05