POWER INDUCTORS-ETC SERIES

■ Features

- Magnetically shielded construction, low DC resistance
- The use of magnetic iron power 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
Product type	size	Material	Inductance value	Inductance Tolerance	Package	Remarks
ETC	0415 0420 ... 1770	H=Alloy T=Carbonyl S=Mixed Powder	R47=0.47UH 2R2=2.2UH 100=10UH 101=100UH	K=±10% M=±20% N=±30%	T=Reel B=Bag	T=Standard S=Special

(1)Series Type

(2)Dimension A*C

(3)Material code H, S, T

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

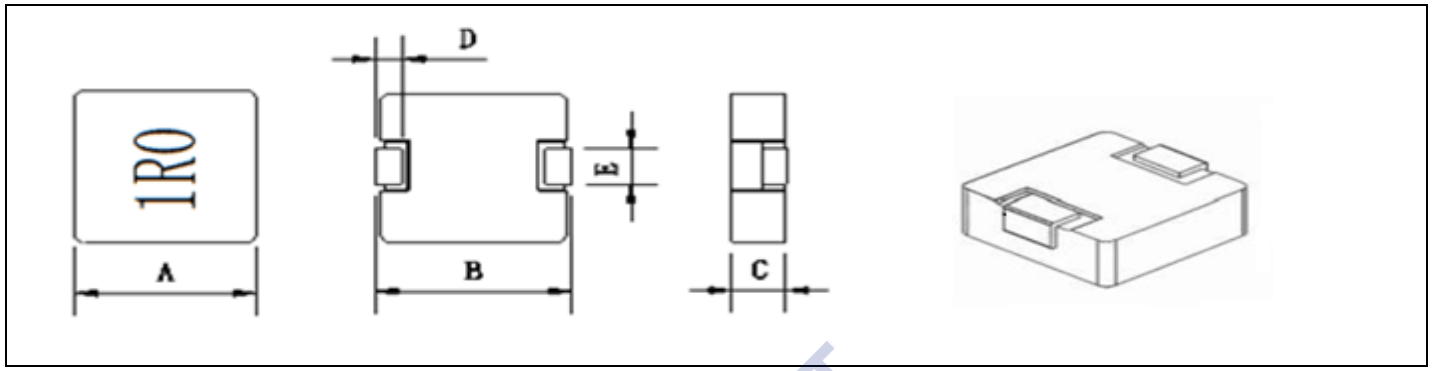
(5)Inductance tolerance M=+/-20% N=+/-30% K=+/-10%

(6)Packaging packed in embossed carrier tape

(7)Remarks

DGPHNST 華生 电话：0755-23173910

■ 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
1335	12.8±0.5	13.5±1.0	3.5MAX	2.5±0.5	3.5±0.5
1340	12.8±0.5	13.5±1.0	4.0MAX	2.5±0.5	3.5±0.5
1350	12.8±0.5	13.5±1.0	5.0MAX	2.5±0.5	3.5±0.5
1365	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

DGPHNST 电话：0755-23173910

■ 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 (mΩ)	
				TYP.	MAX.
ETC0415⋆R47M⋆⋆	0.47	8.0	10.0	17.0	20.0
ETC0415⋆R68M**	0.68	6.0	8.0	19.0	22.0
ETC0415⋆1R0M**	1.0	5.0	7.0	40.0	45.0
ETC0415⋆2R2M**	2.2	3.5	5.0	92.0	100.0
ETC0415⋆3R3M**	3.3	2.5	3.0	105.0	120.0
ETC0415⋆4R7M**	4.7	2.0	2.5	120.0	140.0
ETC0415⋆100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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 (mΩ)	
				TYP.	MAX.
ETC0420⋆R10M**	0.10	12.0	23.0	3.5	4.5
ETC0420⋆R22M**	0.22	11.0	18.0	5.0	7.0
ETC0420⋆R33M**	0.33	8.0	15.0	8.2	10.5
ETC0420⋆R47M**	0.47	7.0	9.5	9.5	14.0
ETC0420⋆R56M**	0.56	6.5	9.0	12.0	18.0
ETC0420⋆R68M**	0.68	6.0	8.0	15.0	20.0
ETC0420⋆1R0M**	1.0	4.5	7.0	25.0	30.0
ETC0420⋆1R5M**	1.5	4.0	6.0	33.0	36.0
ETC0420⋆2R2M**	2.2	3.0	5.0	50.0	58.0
ETC0420⋆3R3M**	3.3	2.5	3.0	83.0	87.0
ETC0420⋆4R7M**	4.7	2.2	3.0	115.0	140.0
ETC0420⋆6R8M**	6.8	2.4	2.5	130.0	175.0
ETC0420⋆100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGPHNST 电话：0755-28173910

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.
ETC0515*R22M**	0.22	13.0	16.0	5.1	7.0
ETC0515*R47M**	0.47	8.0	12.0	12.0	16.0
ETC0515*R68M**	0.68	7.0	9.0	14.0	20.0
ETC0515*1R0M**	1.0	6.0	8.0	18.0	23.0
ETC0515*2R2M**	2.2	4.0	5.0	56.0	65.0
ETC0515*3R3M**	3.3	3.0	4.0	75.0	90.0
ETC0515*4R7M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.
ETC0520*R22M**	0.22	11.0	16.5	4.6	6.0
ETC0520*R33M**	0.33	10.0	15.0	7.5	9.0
ETC0520*R47M**	0.47	9.0	12.0	8.2	10.0
ETC0520*R68M**	0.68	7.0	11.0	12.5	16.0
ETC0520*1R0M**	1.0	7.0	8.0	17.0	19.2
ETC0520*1R5M**	1.5	5.0	7.0	21.0	28.0
ETC0520*2R2M**	2.2	4.0	6.0	31.0	45.0
ETC0520*3R3M**	3.3	3.5	5.0	58.0	70.0
ETC0520*4R7M**	4.7	3.0	3.5	66.0	85.0
ETC0520*6R8M**	6.8	2.0	3.0	95.0	100.0
ETC0520*100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

Specifications reflect recent product changes, for more information refer to PCN announcement (LINK) Specifications are Subject to change.

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0530*R22M**	0.22	14.0	17.0	4.0	5.0
ETC0530*R47M**	0.47	10.0	13.0	8.0	11.0
ETC0530*R68M**	0.68	9.0	12.0	9.0	12.0
ETC0530*1R0M**	1.0	7.0	11.0	14.0	16.0
ETC0530*1R5M**	1.5	5.5	10.0	17.0	22.0
ETC0530*2R2M**	2.2	5.0	9.0	27.0	30.0
ETC0530*3R3M**	3.3	4.5	7.0	33.0	38.0
ETC0530*4R7M**	4.7	4.0	5.0	45.0	60.0
ETC0530*6R8M**	6.8	2.5	3.5	77.0	90.0
ETC0530*100M**	10.0	2.0	3.0	110.0	130.0
ETC0530*150M**	15.0	1.8	2.0	145.0	165.0
ETC0530*220M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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 (mΩ)	
				TYP.	MAX.
ETC0618*R10M**	0.1	18.0	35.0	2.5	3.5
ETC0618*R22M**	0.22	14.0	27.0	3.8	5.2
ETC0618*R33M**	0.33	12.0	22.0	5.6	6.8
ETC0618*R47M**	0.47	11.0	18.0	7.2	8.4
ETC0618*R68M**	0.68	9.0	17.0	9.5	12.0
ETC0618*1R0M**	1.0	7.0	11.0	17.0	22.0
ETC0618*1R5M**	1.5	6.5	10.0	23.0	30.0
ETC0618*2R2M**	2.2	6.0	9.0	31.0	36.0
ETC0618*3R3M**	3.3	4.0	8.0	65.0	70.0
ETC0618*4R7M**	4.7	3.5	5.0	73.0	85.0
ETC0618*6R8M**	6.8	2.8	3.5	100.0	110.0
ETC0618*100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGPINST 肇丰 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0620*R10M**	0.1	18.0	35.0	2.5	3.5
ETC0620*R22M**	0.22	14.0	27.0	3.8	5.2
ETC0620*R33M**	0.33	12.0	22.0	5.6	6.8
ETC0620*R47M**	0.47	11.0	18.0	7.2	8.4
ETC0620*R68M**	0.68	9.0	17.0	9.5	12.0
ETC0620*1R0M**	1.0	7.0	11.0	17.0	22.0
ETC0620*1R5M**	1.5	6.5	10.0	23.0	30.0
ETC0620*2R2M**	2.2	6.0	9.0	31.0	36.0
ETC0620*3R3M**	3.3	4.0	8.0	65.0	70.0
ETC0620*4R7M**	4.7	3.5	5.0	73.0	85.0
ETC0620*6R8M**	6.8	2.8	3.5	100.0	110.0
ETC0620*100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGBMST 肇丰 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0624*R22M**	0.22	20.0	34.0	2.2	2.8
ETC0624*R33M**	0.33	18.0	24.0	3.0	4.1
ETC0624*R47M**	0.47	15.0	21.0	5.6	6.8
ETC0624*R68M**	0.68	9.0	20.0	7.0	8.0
ETC0624*1R0M**	1.0	8.0	13.0	9.0	12.0
ETC0624*1R5M**	1.5	7.0	12.0	15.0	20.0
ETC0624*2R2M**	2.2	6.0	11.0	22.0	28.0
ETC0624*3R3M**	3.3	5.5	8.5	25.0	30.0
ETC0624*4R7M**	4.7	5.0	8.0	55.0	65.0
ETC0624*6R8M**	6.8	3.0	5.0	80.0	90.0
ETC0624*100M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGRINST 華平 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0630*R10M**	0.1	32.5	60.0	1.2	1.7
ETC0630*R15M**	0.15	30.0	40.0	2.0	2.5
ETC0630*R22M**	0.22	23.0	34.0	2.7	3.5
ETC0630*R33M**	0.33	21.0	25.0	3.2	3.9
ETC0630*R47M**	0.47	17.5	25.0	3.7	4.5
ETC0630*R68M**	0.68	14.0	23.0	4.8	5.5
ETC0630*R82M**	0.82	13.0	20.0	6.8	7.0
ETC0630*1R0M**	1.0	11.0	16.0	7.5	9.0
ETC0630*1R5M**	1.5	10.0	14.0	11.0	15.0
ETC0630*2R2M**	2.2	8.0	12.0	15.0	20.0
ETC0630*3R3M**	3.3	6.0	10.0	25.0	30.0
ETC0630*4R7M**	4.7	5.5	9.0	37.0	40.0
ETC0630*5R6M**	5.6	5.0	8.0	50.0	60.0
ETC0630*6R8M**	6.8	5.0	7.0	50.0	60.0
ETC0630*8R2M**	8.2	4.0	6.0	75.0	80.0
ETC0630*100M**	10.0	3.0	5.5	78.0	90.0
ETC0630*150M**	15.0	2.8	4.0	110.0	130.0
ETC0630*220M**	22.0	2.5	3.5	127.0	150.0
ETC0630*330M**	33.0	1.8	2.0	218.0	245.0
ETC0630*470M**	47.0	0.8	1.8	255.0	290.0

DGBINST 鑫丰 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0640*R22M**	0.22	23.0	35.0	2.5	3.0
ETC0640*R33M**	0.33	21.0	25.0	2.8	3.5
ETC0640*R47M**	0.47	17.0	23.0	3.7	4.5
ETC0640*R68M**	0.68	14.0	20.0	4.2	5.5
ETC0640*1R0M**	1.0	10.0	18.0	5.5	7.0
ETC0640*1R5M**	1.5	9.0	15.0	9.0	12.0
ETC0640*2R2M**	2.2	8.0	12.0	10.0	13.0
ETC0640*3R3M**	3.3	6.5	11.0	17.0	20.0
ETC0640*4R7M**	4.7	6.0	9.0	22.0	25.0
ETC0640*6R8M**	6.8	5.0	8.0	41.0	45.0
ETC0640*8R2M**	8.2	4.0	7.0	46.0	52.0
ETC0640*100M**	10.0	3.5	6.0	53.0	65.0
ETC0640*150M**	15.0	3.0	4.5	70.0	80.0
ETC0640*220M**	22.0	2.5	4.0	100.0	120.0
ETC0640*330M**	33.0	2.0	3.0	165.0	200.0
ETC0640*470M**	47.0	1.5	2.0	220.0	260.0

DGPINST 鑫洋 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC0650*R15M**	0.15	36.0	45.0	0.8	1.0
ETC0650*R22M**	0.22	25.0	45.0	2.3	3.0
ETC0650*R33M**	0.33	23.0	35.0	2.8	3.5
ETC0650*R47M**	0.47	18.0	24.0	3.5	4.5
ETC0650*R68M**	0.68	14.0	21.0	4.2	5.5
ETC0650*R82M**	0.82	14.0	20.0	5.5	7.0
ETC0650*1R0M**	1.0	12.0	18.0	6.5	7.5
ETC0650*1R5M**	1.5	10.0	15.0	7.0	8.5
ETC0650*2R2M**	2.2	8.0	12.0	10.5	13.0
ETC0650*3R3M**	3.3	7.0	11.0	14.0	20.0
ETC0650*4R7M**	4.7	7.0	10.0	21.0	25.0
ETC0650*6R8M**	6.8	5.0	7.0	24.0	28.0
ETC0650*8R2M**	8.2	4.5	8.0	37.0	45.0
ETC0650*100M**	10.0	4.0	7.0	45.0	60.0
ETC0650*150M**	15.0	3.5	5.0	62.0	70.0
ETC0650*220M**	22.0	3.0	4.0	80.0	90.0
ETC0650*330M**	33.0	2.5	3.0	180.0	220.0
ETC0650*470M**	47.0	2.0	2.8	195.0	240.0
ETC0650*560M**	56.0	1.5	2.5	210.0	260.0
ETC0650*680M**	68.0	1.3	1.8	265.0	310.0
ETC0650*101M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGBEST 鑫宇 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC1030*R36M**	0.36	23.0	35.0	1.4	1.6
ETC1030*R56M**	0.56	18.0	24.0	1.5	1.7
ETC1030*R68M**	0.68	17.0	23.0	2.6	3.2
ETC1030*1R0M**	1.0	13.0	18.0	5.0	7.0
ETC1030*1R5M**	1.5	10.0	16.0	7.0	9.0
ETC1030*2R2M**	2.2	9.0	14.0	10.0	12.0
ETC1030*3R3M**	3.3	7.0	9.0	15.0	20.0
ETC1030*4R7M**	4.7	6.0	8.5	20.0	25.0
ETC1030*6R8M**	6.8	5.0	7.0	33.0	40.0
ETC1030*8R2M**	8.2	4.0	6.0	47.0	55.0
ETC1030*100M**	10.0	4.0	5.0	50.0	56.0
ETC1030*150M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGPINST 肇洋 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC1040⋆R22M**	0.22	30.0	60.0	0.8	1.1
ETC1040⋆R36M**	0.36	28.0	50.0	1.1	1.4
ETC1040⋆R47M**	0.47	25.0	35.0	1.2	1.5
ETC1040⋆R56M**	0.56	23.0	33.0	1.5	1.7
ETC1040⋆R68M**	0.68	22.0	32.0	1.8	2.3
ETC1040⋆R82M**	0.82	20.0	30.0	2.3	2.5
ETC1040⋆1R0M**	1.0	18.0	28.0	3.2	4.1
ETC1040⋆1R5M**	1.5	16.0	25.0	4.8	5.8
ETC1040⋆2R2M**	2.2	12.0	24.0	7.2	9.0
ETC1040⋆3R3M**	3.3	11.0	16.0	10.0	13.5
ETC1040⋆4R7M**	4.7	8.0	13.0	13.5	16.5
ETC1040⋆5R6M**	5.6	7.0	12.0	18.0	22.0
ETC1040⋆6R8M**	6.8	6.0	11.0	23.0	28.0
ETC1040⋆8R2M**	8.2	5.5	10.0	27.0	30.0
ETC1040⋆100M**	10.0	5.0	9.0	31.0	36.5
ETC1040⋆150M**	15.0	4.5	7.0	39.0	45.0
ETC1040⋆220M**	22.0	4.0	6.0	55.0	60.0
ETC1040⋆330M**	33.0	3.5	5.0	127.0	145.0
ETC1040⋆470M**	47.0	3.0	4.0	127.0	145.0
ETC1040⋆680M**	68.0	2.5	3.5	200.0	215.0
ETC1040⋆101M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGPINST 鑫洋 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC1050⋆R36M**	0.36	38.0	55.0	0.9	1.1
ETC1050⋆R47M**	0.47	36.0	50.0	1.1	1.3
ETC1050⋆R68M**	0.68	25.0	40.0	1.6	2.0
ETC1050⋆R82M**	0.82	20.0	34.0	2.0	2.5
ETC1050⋆1R0M**	1.0	19.0	30.0	2.3	2.7
ETC1050⋆1R5M**	1.5	18.0	25.0	3.9	4.6
ETC1050⋆2R2M**	2.2	17.0	20.0	4.7	5.5
ETC1050⋆3R3M**	3.3	10.0	16.0	5.8	7.0
ETC1050⋆4R7M**	4.7	9.0	15.0	10.0	13.0
ETC1050⋆6R8M**	6.8	8.0	13.0	17.0	22.0
ETC1050⋆8R2M**	8.2	7.0	11.0	22.0	25.0
ETC1050⋆100M**	10.0	6.0	10.0	23.0	28.0
ETC1050⋆150M**	15.0	5.0	8.0	39.0	45.0
ETC1050⋆220M**	22.0	4.5	7.0	55.0	60.0
ETC1050⋆330M**	33.0	4.0	6.0	90.0	100.0
ETC1050⋆470M**	47.0	3.5	5.0	127.0	145.0
ETC1050⋆680M**	68.0	3.0	5.0	215.0	258.0
ETC1050⋆101M**	100.0	2.5	4.0	230.0	270.0

DGPINST 鑫宇 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

POWER INDUCTORS-ETC SERIES

ETC1335

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 (mΩ)	
				TYP.	MAX.
ETC1335⋆R22M**	0.22	35.0	60.0	0.9	1.2
ETC1335⋆R33M**	0.33	32.0	55.0	1.1	1.4
ETC1335⋆R47M**	0.47	30.0	50.0	1.3	1.5
ETC1335⋆R68M**	0.68	28.0	49.0	2.1	2.5
ETC1335⋆1R0M**	1.0	20.0	30.0	3.1	3.5
ETC1335⋆1R5M**	1.5	15.0	24.0	4.5	6.0
ETC1335⋆2R2M**	2.2	14.0	20.0	7.0	8.0
ETC1335⋆3R3M**	3.3	12.0	16.0	10.0	12.0
ETC1335⋆4R7M**	4.7	10.0	14.0	14.0	16.0
ETC1335⋆6R8M**	6.8	8.0	12.0	21.0	25.0
ETC1335⋆100M**	10.0	6.0	10.0	28.0	35.0
ETC1335⋆150M**	15.0	4.0	7.0	58.0	70.0
ETC1335⋆220M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGBINST 鑫宇 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

ETC1340

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 (mΩ)	
				TYP.	MAX.
ETC1340⋆R22M**	0.22	40.0	60.0	0.5	0.7
ETC1340⋆R33M**	0.33	38.0	55.0	0.7	0.9
ETC1340⋆R47M**	0.47	31.0	52.0	1.3	1.5
ETC1340⋆R68M**	0.68	28.0	49.0	2.1	2.5
ETC1340⋆1R0M**	1.0	20.0	38.0	2.9	3.5
ETC1340⋆1R5M**	1.5	16.0	30.0	3.6	4.5
ETC1340⋆2R2M**	2.2	15.0	22.0	6.5	8.0
ETC1340⋆3R3M**	3.3	14.0	20.0	8.7	10.0
ETC1340⋆4R7M**	4.7	9.0	15.0	12.0	14.0
ETC1340⋆5R6M**	5.6	8.0	14.0	15.0	17.0
ETC1340⋆6R8M**	6.8	7.0	12.0	17.0	22.0
ETC1340⋆100M**	10.0	6.0	10.0	28.0	35.0
ETC1340⋆150M**	15.0	5.0	9.0	55.0	65.0
ETC1340⋆220M**	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℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

DGBEST 鑫宇 电话：0755-23173910

POWER INDUCTORS-ETC SERIES

ETC1350

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 (mΩ)	
				TYP.	MAX.
ETC1350*R22M**	0.22	40.0	60.0	0.5	0.7
ETC1350*R36M**	0.36	38.0	55.0	0.7	0.9
ETC1350*R47M**	0.47	31.0	54.0	1.1	1.3
ETC1350*R68M**	0.68	30.0	51.0	1.3	1.5
ETC1350*R82M**	0.82	28.0	50.0	1.7	2.2
ETC1350*1R0M**	1.0	25.0	50.0	2.1	2.5
ETC1350*1R5M**	1.5	21.0	48.0	3.1	4.1
ETC1350*2R2M**	2.2	16.0	25.0	3.3	4.5
ETC1350*3R3M**	3.3	15.0	22.0	7.5	9.0
ETC1350*4R7M**	4.7	12.0	20.0	10.0	12.0
ETC1350*6R8M**	6.8	11.0	18.0	15.0	18.0
ETC1350*8R2M**	8.2	10.0	16.0	19.0	23.0
ETC1350*100M**	10.0	7.0	12.0	23.0	25.5
ETC1250*150M**	15.0	6.0	9.0	26.0	30.0
ETC1350*220M**	22.0	4.0	7.0	30.0	35.0
ETC1350*330M**	33.0	3.0	6.0	52.0	60.0
ETC1350*470M**	47.0	2.5	5.0	85.0	100.0
ETC1350*680M**	68.0	2.0	3.5	154.0	180.0
ETC1350*101M**	100.0	2.0	3.0	243.0	255.0

DGRINST 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

POWER INDUCTORS-ETC SERIES

ETC1365

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 (mΩ)	
				TYP.	MAX.
ETC1365*R22M**	0.22	45.0	80.0	0.6	0.8
ETC1365*R36M**	0.36	38.0	70.0	0.8	1.0
ETC1365*R47M**	0.47	35.0	60.0	1.1	1.3
ETC1365*R68M**	0.68	30.0	54.0	1.2	1.5
ETC1365*R82M**	0.82	26.0	52.0	1.6	2.0
ETC1365*1R0M**	1.0	25.0	50.0	2.1	2.5
ETC1365*1R5M**	1.5	21.0	48.0	3.1	4.1
ETC1365*2R2M**	2.2	18.0	40.0	3.5	4.5
ETC1365*3R3M**	3.3	16.0	23.0	5.5	7.0
ETC1365*4R7M**	4.7	14.0	21.0	8.5	11.0
ETC1365*6R8M**	6.8	11.5	18.0	11.0	14.0
ETC1365*8R2M**	8.2	10.0	16.0	16.0	20.0
ETC1365*100M**	10.0	10.0	15.5	18.0	22.0
ETC1365*150M**	15.0	7.0	12.0	25.0	30.0
ETC1365*220M**	22.0	6.0	10.0	30.0	36.0
ETC1365*330M**	33.0	5.0	9.0	45.0	55.0
ETC1365*470M**	47.0	4.0	6.0	62.0	75.0
ETC1365*680M**	68.0	3.0	5.0	96.0	115.0
ETC1365*820M**	82.0	2.5	4.5	110.0	130.0
ETC1365*101M**	100.0	2.0	3.5	125.0	145.0
ETC1365*151M**	150.0	1.6	2.5	245.0	280.0

DGBUST 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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.

POWER INDUCTORS-ETC SERIES

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 (mΩ)	
				TYP.	MAX.
ETC1770*R22M**	0.22	60.0	100.0	0.55	0.7
ETC1770*R33M**	0.33	55.0	90.0	0.7	0.8
ETC1770*R47M**	0.47	50.0	80.0	0.8	1.0
ETC1770*R56M**	0.56	46.0	70.0	0.9	1.15
ETC1770*R82M**	0.82	42.0	60.0	1.17	1.3
ETC1770*1R0M**	1.0	38.0	50.0	1.45	1.7
ETC1770*1R5M**	1.5	35.0	45.0	1.8	2.15
ETC1770*2R2M**	2.2	25.0	34.0	2.15	2.6
ETC1770*3R3M**	3.3	17.0	24.0	2.61	3.5
ETC1770*4R7M**	4.7	15.0	21.0	3.38	5.0
ETC1770*6R8M**	6.8	15.0	18.0	5.53	7.0
ETC1770*8R2M**	8.2	12.0	18.0	7.0	9.0
ETC1770*100M**	10.0	11.0	17.0	8.0	10.0
ETC1770*150M**	15.0	9.0	12.0	12.0	15.0
ETC1770*220M**	22.0	7.0	9.5	19.18	25.0
ETC1770*330M**	33.0	6.5	9.0	30.65	35.0
ETC1770*470M**	47.0	5.5	7.5	36.75	40.0
ETC1770*680M**	68.0	4.0	5.0	61.0	80.0
ETC1770*820M**	82.0	4.0	4.5	95.55	105.0
ETC1770*101M**	100.0	3.0	4.0	111.0	120.0

DGPINST 电话：0755-23173910

Notes:

1. Test frequency : L : 100KHz /1.0V.
2. All test data referenced to 25℃ ambient.
3. Heat Rated Current (I rms) will cause the coil temperature rise approximately Δt of 40℃ (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℃	
Storage temperature	-10~+40℃,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)	△L30% typical.	Saturation DC Current (Isat) will cause L0 to drop △L(%)(keep quickly).
Heat Rated Current (Irms)	Approximately △T≦40℃	Heat Rated Current (Irms) will cause the coil temperature rise △T(℃) without core loss.

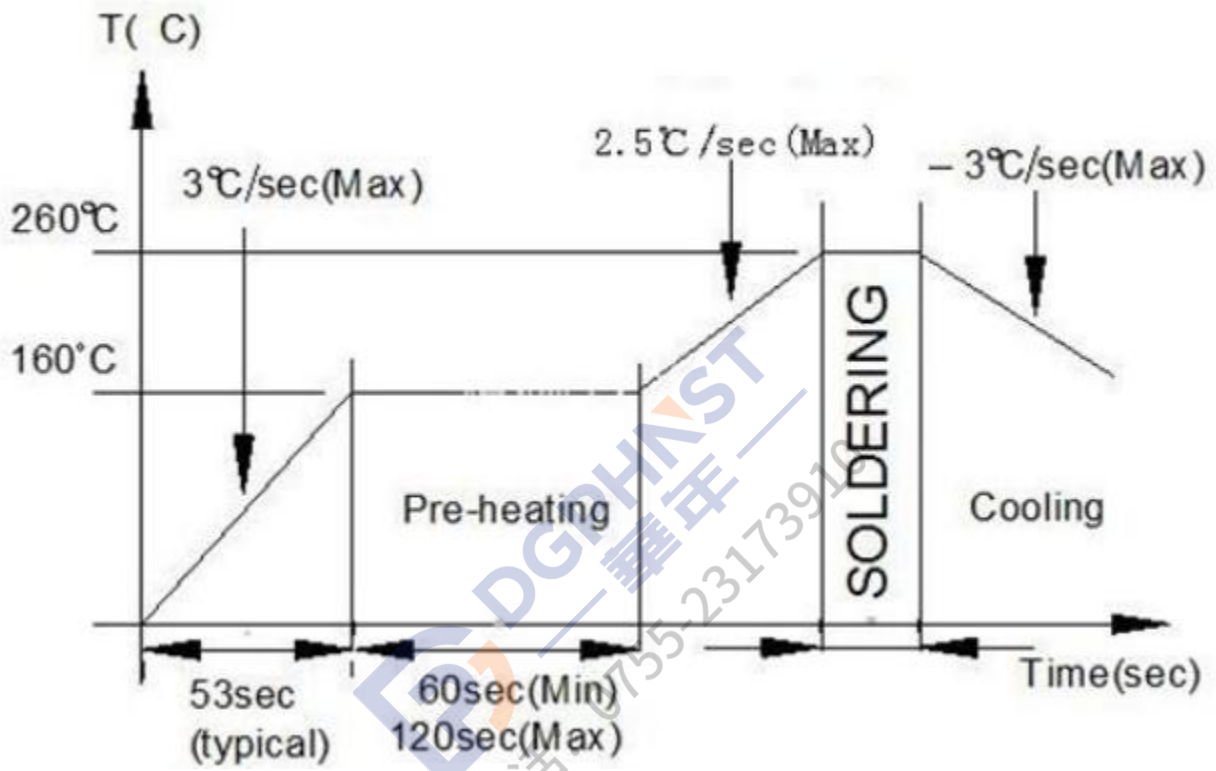
DGPHNST 華丰 电话：0755-23173910

Reliability Test

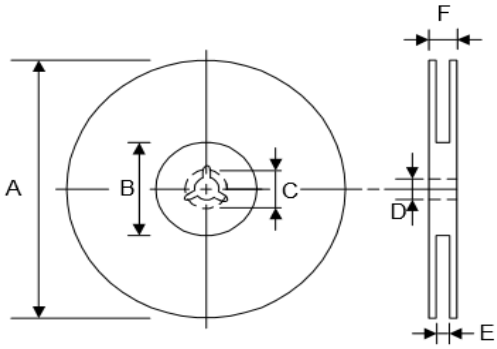
High Temperature Exposure Test	Electric specifications should be satisfied	Temperature:125±2℃. Duration:1000±12hrs.
Low Temperature Life Test Low Temperature Life Test		Temperature:-40±2℃
Biased Humidity Test		Humidity:85±3%RH. Temperature:85±2℃. Duration:1000±12hrs.
Thermal shock test		Condition for 1 cycle Step1:-40+0 / -2℃ 15±1 min. Step2:Room temperature within≦0.2 min. Step3:+125+2 / -0℃ 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℃ Duration：5minutes Temperature：260±5℃，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℃，4±1seconds Flux 、 solder for leadfree (ANSI /J-STD-002C Method B)

DGPHNST 華丰 电话：0755-23173910

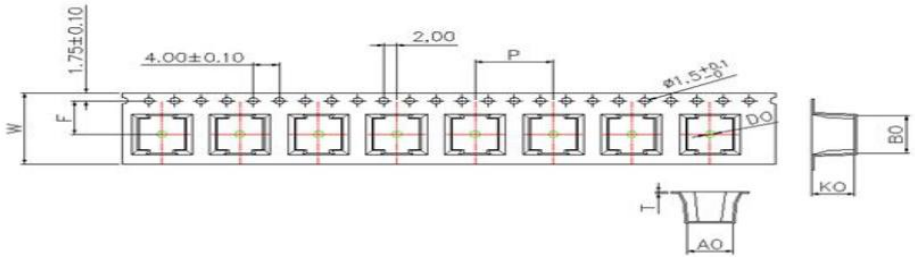
■ Soldering Condition Recommended



■ 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



Specifications reflect recent product changes, for more information refer to PCN announcement (LINK) Specifications are Subject to change.

POWER INDUCTORS-ETC SERIES

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

DOPHNY 电话：0755-27739101