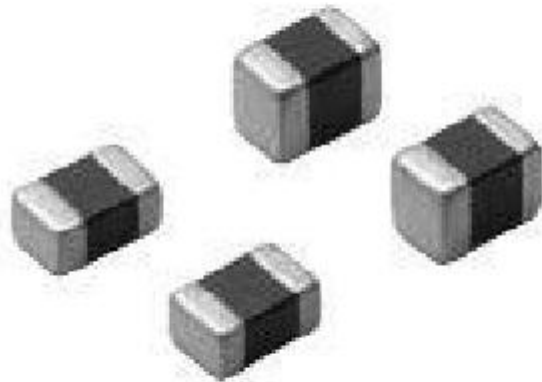




ELECTRONIC COMPANY

SMD CHIP INDUCTOR

DCY SERIES



FEATURES/APPLICATOINS

- .Carrier tape packing use for SMT
- .Can be used in a wide range of frequency to suppress EMI
- .Excellent solder ability
- .Suitable for reflow STM craft soldering
- .Lead free products, ROHS compliant
- .Widely use in Noise suppression in Digital equipment such as Computer peripheral devices /VCR /VCD /DVD /Camera /OA equipments etc.

Page

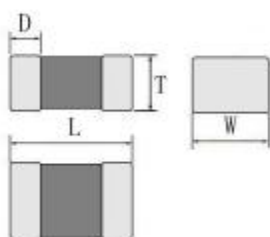
PRODUCT INDICATION.....	2
SHAPE AND DIMENSIONS.....	2
DCY1005.....	4
DCY1608.....	6
DCY2012.....	8
DCY3216.....	10

PRODUCT INDICATION

<u>DCY</u>	<u>1608</u>	<u>F</u>	<u>R10</u>	<u>K</u>
①	②	③	④	⑤

- ① Product type: DCY type
- ② External dimension: 16 for Diameter 1.6mm, 08 for Width 0.8mm
- ③ Material code: F, C, L, Q, S, T
- ④ Nominal impedance: R10 for 100NH
- ⑤ Tolerance: J for $\pm 5\%$ K for $\pm 10\%$ M for $\pm 20\%$

SHAPE AND DIMENSIONS



Part No.	L	W	T	D
1005 (0402)	1.0 $\pm$ 0.15 (0.040 $\pm$ 0.006)	0.5 $\pm$ 0.15 (0.020 $\pm$ 0.006)	0.5 $\pm$ 0.15 (0.020 $\pm$ 0.006)	0.25 $\pm$ 0.10 (0.010 $\pm$ 0.004)
1608 (0603)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	0.8 $\pm$ 0.2 (0.031 $\pm$ 0.008)	0.8 $\pm$ 0.2 (0.031 $\pm$ 0.008)	0.3 $\pm$ 0.2 (0.01 $\pm$ 0.008)
2012 (0805) 0.047uh~18uh	2.0 $\pm$ 0.2 (0.079 $\pm$ 0.008)	1.2 $\pm$ 0.2 (0.047 $\pm$ 0.008)	0.9 $\pm$ 0.2 (0.035 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)
2012 (0805) 22uh~100uh	2.0 $\pm$ 0.2 (0.079 $\pm$ 0.008)	1.2 $\pm$ 0.2 (0.047 $\pm$ 0.008)	1.2 $\pm$ 0.2 (0.047 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)
3216 (1206) 0.047uh~22uh	3.2 $\pm$ 0.2 (0.126 $\pm$ 0.008)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	0.9 $\pm$ 0.2 (0.035 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)
3216 (1206) 27uh~100uh	3.2 $\pm$ 0.2 (0.126 $\pm$ 0.008)	1.6 $\pm$ 0.2 (0.063 $\pm$ 0.008)	1.1 $\pm$ 0.2 (0.043 $\pm$ 0.008)	0.5 $\pm$ 0.3 (0.020 $\pm$ 0.012)



■ Notes:

● HP4191A

Impedance instrument HP4191A Impedance analyzer

● 100MHz

Inductance testing condition: 100MHz.

●

DCR instrument: TH2512B or DCR test equipment equivalent .

●

Rated Current test: VR7210&VR113H.

●

Rated Current definition: Inductance drop by 25% or temperature rise by 40°C ,
the lesser of the minimum as the rated current.

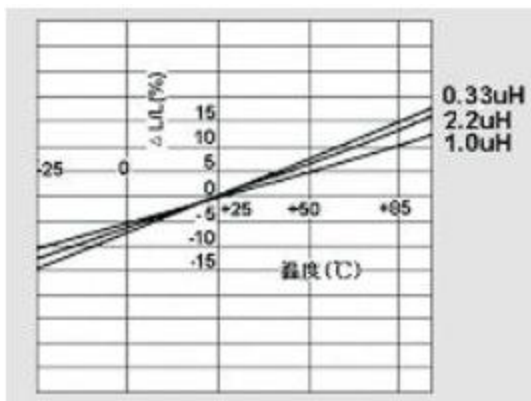
Temperature storage:-25~80 ; the relative humidity : RH65%~85%

**Electrical Characteristics DCY1005(0402) Series(10000pcs/reel)**

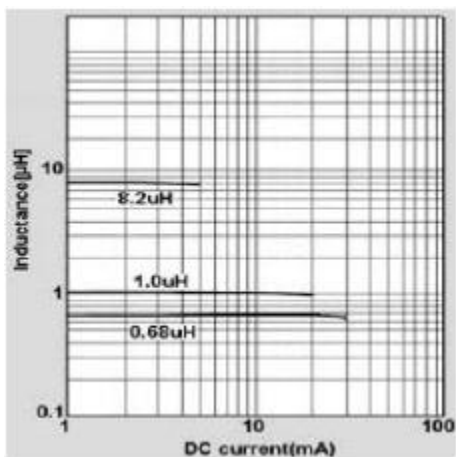
OPEARATING TEMP. -55~125°C

Pare No	L (μ H)	Q Min.	L, Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Q)Max.	Ir(mA)Max.
DCY1005F47NM	0.047	10	50	220	0.45	25
DCY1005F68NM	0.068	10	50	210	0.45	25
DCY1005F82NM	0.082	10	50	200	0.45	25
DCY1005FR10K	0.1	10	25	200	0.8	25
DCY1005FR12K	0.12	10	25	165	0.8	25
DCY1005FR15K	0.15	10	25	140	0.9	25
DCY1005FR18K	0.18	10	25	120	0.9	25
DCY1005FR22K	0.22	10	25	110	1.2	25
DCY1005FR27K	0.27	15	25	95	1.2	25
DCY1005FR33K	0.33	15	25	85	1.25	18
DCY1005FR39K	0.39	15	25	70	1.5	18
DCY1005FR47K	0.47	20	10	80	0.7	15
DCY1005FR56K	0.56	20	10	75	0.8	15
DCY1005FR68K	0.68	20	10	70	0.9	15
DCY1005FR82K	0.82	20	10	65	0.9	15
DCY1005F1R0K	1	20	10	40	0.9	15
DCY1005F1R2K	1.2	20	10	35	1.2	15
DCY1005F1R5K	1.5	20	10	30	1.2	15
DCY1005F1R8K	1.8	20	10	30	1.45	15
DCY1005F2R2K	2.2	20	10	28	1.7	10
DCY1005F2R7K	2.7	20	10	22	2	10
DCY1005F3R3K	3.3	20	10	20	2.35	10
DCY1005F3R9K	3.9	20	4	18	2	3
DCY1005F4R7K	4.7	20	4	15	2.35	3
DCY1005F5R6K	5.6	20	1	13	2	2
DCY1005F6R8K	6.8	20	1	11	2.35	2
DCY1005F8R2K	8.2	20	1	10	2.55	2
DCY1005F100K	10	20	1	9	3.15	2

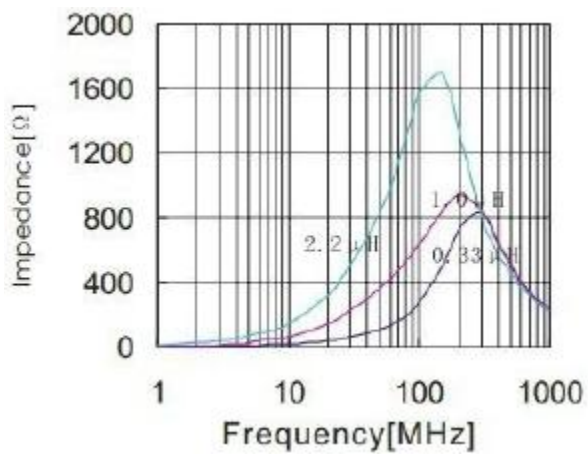
CHARACTERISTICS CURVES



FERRITE CHIP INDUCTORS



IMPEDANCE VS. FREQUENCY

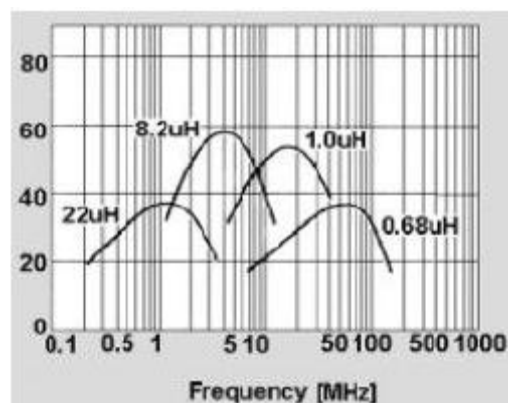
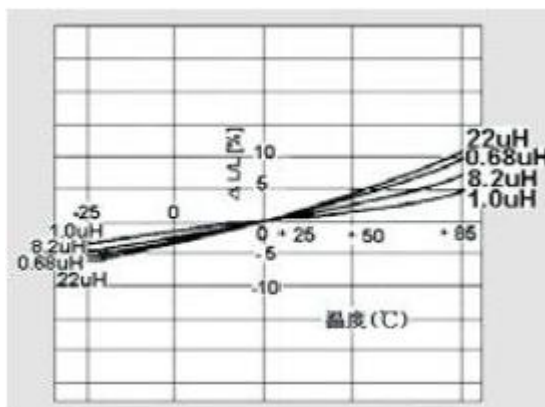


**Electrical Characteristics DCY1608(0603) Series(4000pcs/reel)**

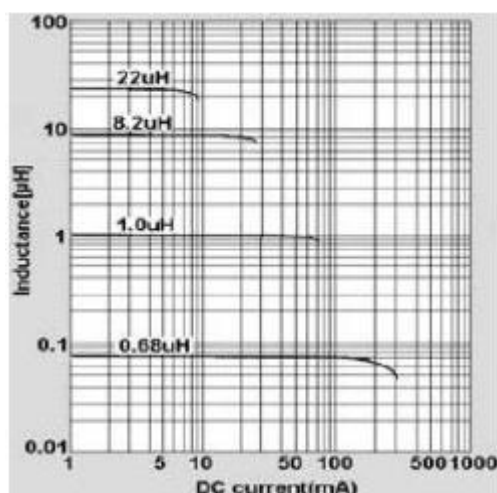
OPERATING TEMP. -40~85°C

Pare No	L (μ H)	Q Min.	L, Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Ω)Max.	Ir(mA)Max.
DCY1608F47NM	0.047	10	50	260	0.3	50
DCY1608F68NM	0.068	10	50	250	0.3	50
DCY1608F82NM	0.082	10	50	245	0.3	50
DCY1608FR10K	0.1	15	25	240	0.5	50
DCY1608FR12K	0.12	15	25	205	0.5	50
DCY1608FR15K	0.15	15	25	180	0.6	50
DCY1608FR18K	0.18	15	25	165	0.6	50
DCY1608FR22K	0.22	15	25	150	0.8	50
DCY1608FR27K	0.27	15	25	136	0.8	50
DCY1608FR33K	0.33	15	25	125	0.85	35
DCY1608FR39K	0.39	15	25	110	1	35
DCY1608FR47K	0.47	15	25	105	1.35	35
DCY1608FR56K	0.56	15	25	95	1.55	35
DCY1608FR68K	0.68	15	25	90	1.7	35
DCY1608FR82K	0.82	15	25	85	2.1	35
DCY1608F1R0K	1	35	10	75	0.6	25
DCY1608F1R2K	1.2	35	10	65	0.8	25
DCY1608F1R5K	1.5	35	10	60	0.8	25
DCY1608F1R8K	1.8	35	10	55	0.95	25
DCY1608F2R2K	2.2	35	10	50	1.15	15
DCY1608F2R7K	2.7	35	10	45	1.35	15
DCY1608F3R3K	3.3	35	10	40	1.55	15
DCY1608F3R9K	3.9	35	10	35	1.7	15
DCY1608F4R7K	4.7	35	10	33	2.1	15
DCY1608F5R6K	5.6	35	4	22	1.55	5
DCY1608F6R8K	6.8	35	4	20	1.7	5
DCY1608F8R2K	8.2	35	4	18	2.1	5
DCY1608F100K	10	30	2	17	1.85	3
DCY1608F120K	12	30	2	15	2.1	3
DCY1608F150K	15	20	1	14	1.7	1
DCY1608F180K	18	20	1	13	1.85	1
DCY1608F220K	22	20	1	11	2.1	1
DCY1608F270K	27	20	1	10	2.75	1
DCY1608F330K	33	20	1	9	2.95	1

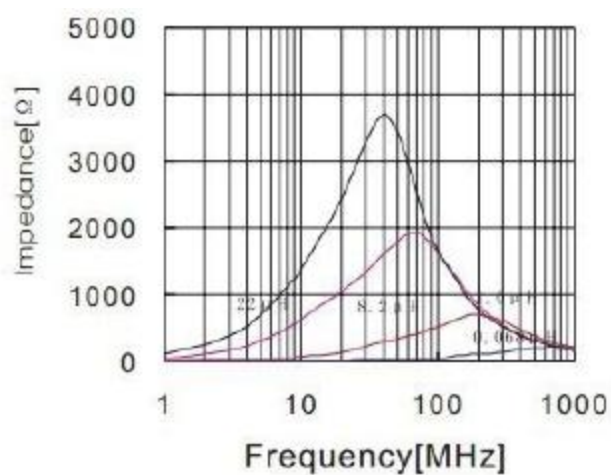
CHARACTERISTICS CURVES



FERRITE CHIP INDUCTORS



IMPEDANCE VS. FREQUENCY





Electrical Characteristics DCY2012(0805) Series (between 0.047 μ H to 18 μ H)

(4000pcs/reel)

OPEARATING TEMP. -40~85°C

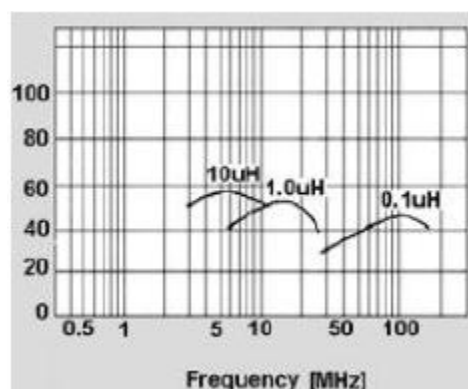
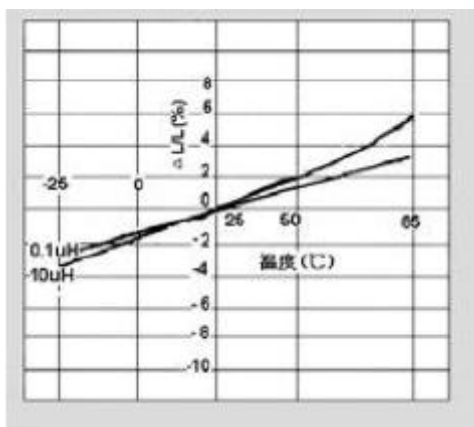
Pare No	L (μ H)	Q Min.	L,Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Ω)Max.	Ir(mA)Max.
DCY2012F47NM	0.047	15	50	320	0.2	300
DCY2012F56NM	0.056	15	50	300	0.2	300
DCY2012F68NM	0.068	15	50	280	0.2	300
DCY2012F82NM	0.082	15	50	255	0.2	300
DCY2012FR10K	0.1	20	25	235	0.3	250
DCY2012FR12K	0.12	20	25	220	0.3	250
DCY2012FR15K	0.15	20	25	200	0.4	250
DCY2012FR18K	0.18	20	25	185	0.4	250
DCY2012FR22K	0.22	20	25	170	0.5	250
DCY2012FR27K	0.27	20	25	150	0.5	250
DCY2012FR33K	0.33	20	25	145	0.55	250
DCY2012FR39K	0.39	25	25	135	0.65	200
DCY2012FR47K	0.47	25	25	125	0.65	200
DCY2012FR56K	0.56	25	25	115	0.75	150
DCY2012FR68K	0.68	25	25	105	0.8	150
DCY2012FR82K	0.82	25	25	100	1	150
DCY2012F1R0K	1	45	10	75	0.4	50
DCY2012F1R2K	1.2	45	10	65	0.5	50
DCY2012F1R5K	1.5	45	10	60	0.5	50
DCY2012F1R8K	1.8	45	10	55	0.6	50
DCY2012F2R2K	2.2	45	10	50	0.65	30
DCY2012F2R7K	2.7	45	10	45	0.75	30
DCY2012F3R3K	3.3	45	10	41	0.8	30
DCY2012F3R9K	3.9	45	10	38	0.9	30
DCY2012F4R7K	4.7	45	10	35	1	30
DCY2012F5R6K	5.6	50	4	32	0.9	15
DCY2012F6R8K	6.8	50	4	29	1	15
DCY2012F8R2K	8.2	50	4	26	1.1	15
DCY2012F100K	10	50	2	24	1.15	15
DCY2012F120K	12	50	2	22	1.25	15
DCY2012F150K	15	30	1	19	0.8	5
DCY2012F180K	18	30	1	18	0.9	5

Electrical Characteristics DCY2012(0805) Series (between 22 μ H to 100 μ H) (4000pcs/reel)

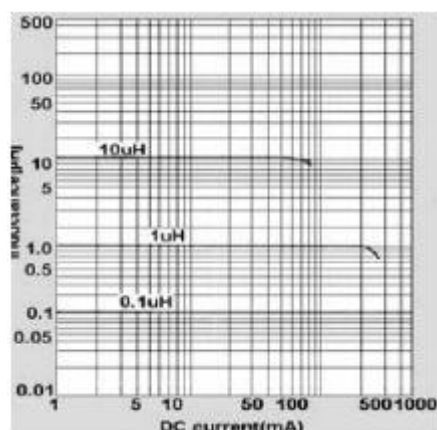
OPERATING TEMP. -40~85°C

Pare No	L (μ H)	Q Min.	L,Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Ω)Max.	Ir(mA)Max.
DCY2012F220K	22	30	1	16	1.1	5
DCY2012F270K	27	30	1	14	1.15	5
DCY2012F330K	33	30	0.4	13	1.25	5
DCY2012F390K	39	35	2	8	2.9	4
DCY2012F470K	47	35	2	7.5	3	4
DCY2012F560K	56	35	2	7	3.1	4
DCY2012F680K	68	25	1	6.5	2.9	2
DCY2012F820K	82	25	1	6	3	2
DCY2012F101K	100	25	1	6	3	2

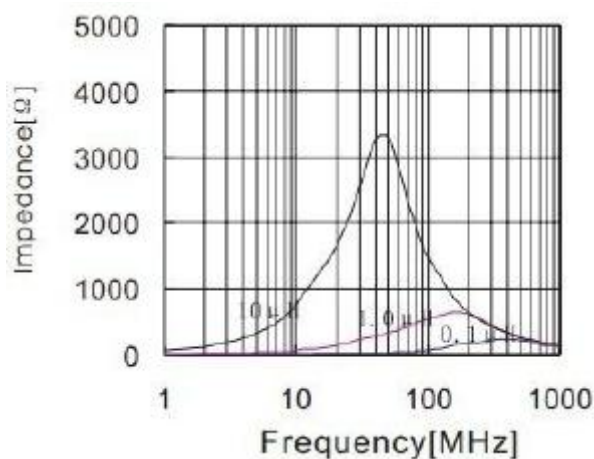
CHARACTERISTICS CURVES



FERRITE CHIP INDUCTORS



IMPEDANCE VS. FREQUENCY





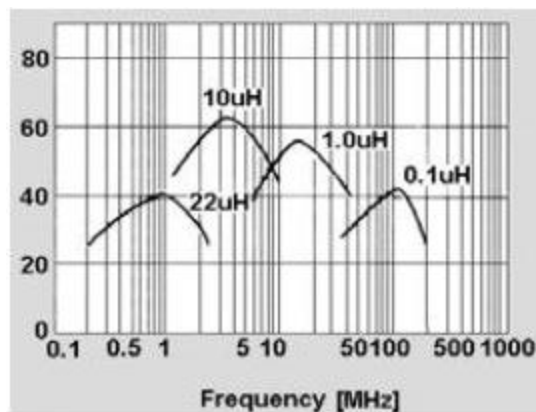
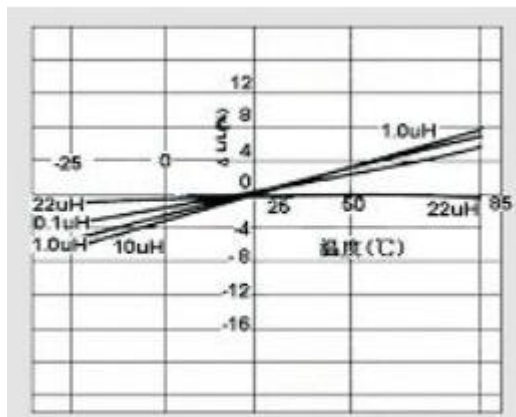
Electrical Characteristics DCY3216(1206) Series (between 0.047 μ H to 22 μ H)

(4000pcs/reel)

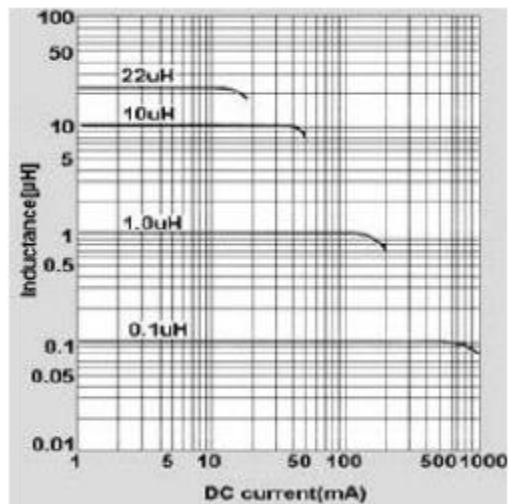
OPERATING TEMP. -40~85℃

Pare No	L (μ H)	Q Min.	L, Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Ω)Max.	Ir(mA)Max.
DCY3216F47NM	0.047	20	50	320	0.15	300
DCY3216F68NM	0.068	20	50	280	0.25	300
DCY3216F82NM	0.082	20	50	255	0.25	300
DCY3216FR10K	0.1	20	25	235	0.25	250
DCY3216FR12K	0.12	20	25	220	0.3	250
DCY3216FR15K	0.15	20	25	200	0.3	250
DCY3216FR18K	0.18	20	25	185	0.4	250
DCY3216FR22K	0.22	20	25	170	0.4	250
DCY3216FR27K	0.27	20	25	150	0.5	250
DCY3216FR33K	0.33	20	25	145	0.6	250
DCY3216FR39K	0.39	25	25	135	0.5	200
DCY3216FR47K	0.47	25	25	125	0.6	200
DCY3216FR56K	0.56	25	25	115	0.7	150
DCY3216FR68K	0.68	25	25	105	0.8	150
DCY3216FR82K	0.82	25	25	100	0.9	150
DCY3216F1R0K	1	45	10	75	0.4	50
DCY3216F1R2K	1.2	45	10	65	0.5	50
DCY3216F1R5K	1.5	45	10	60	0.5	50
DCY3216F1R8K	1.8	45	10	55	0.5	50
DCY3216F2R2K	2.2	45	10	50	0.6	50
DCY3216F2R7K	2.7	45	10	45	0.6	50
DCY3216F3R3K	3.3	45	10	41	0.7	50
DCY3216F3R9K	3.9	45	10	38	0.8	50
DCY3216F4R7K	4.7	45	10	35	0.9	50
DCY3216F5R6K	5.6	50	4	32	0.7	25
DCY3216F6R8K	6.8	50	4	29	0.8	25
DCY3216F8R2K	8.2	50	4	26	0.9	25
DCY3216F100K	10	50	2	24	1	25
DCY3216F120K	12	50	2	22	1.05	15
DCY3216F150K	15	35	1	19	0.7	5
DCY3216F180K	18	35	1	18	0.7	5
DCY3216F220K	22	35	1	16	0.9	5

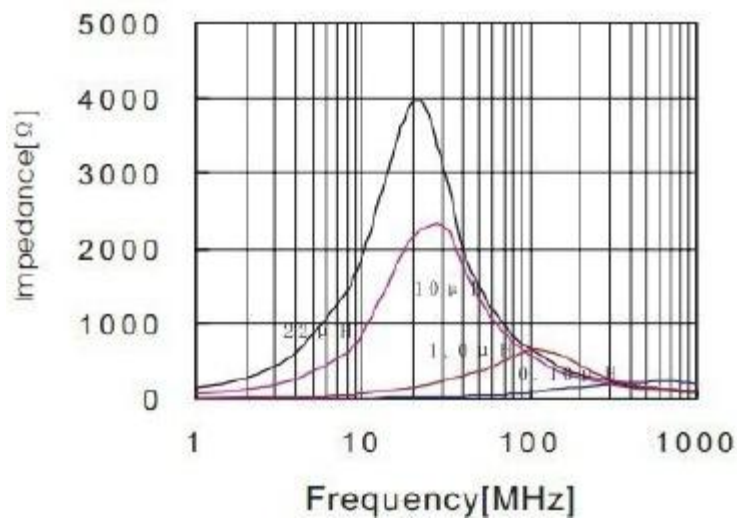
CHARACTERISTICS CURVES



FERRITE CHIP INDUCTORS



IMPEDANCE VS. FREQUENCY



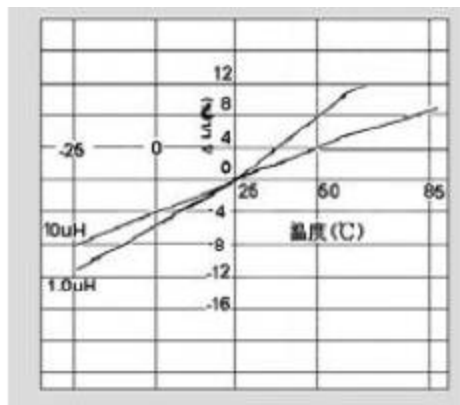
Electrical Characteristics DCY3216(1206) Series (between 22 μ H to 100 μ H)

(4000pcs/reel)

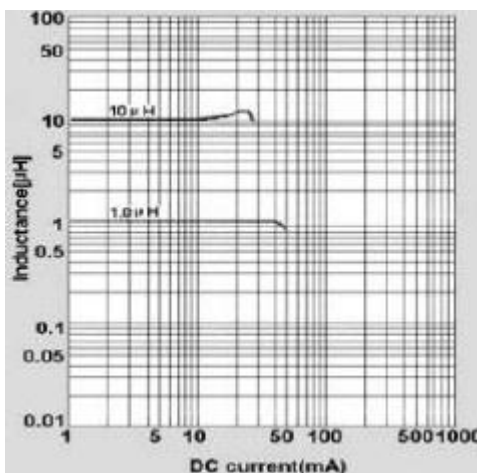
OPEARATING TEMP. -40~85 $^{\circ}$ C

Pare No	L (μ H)	Q Min.	L,Qtest Freq.(MHz)	S.R.F(MHz) Min.	DCR(Ω)Max.	Ir(mA)Max.
DCY3216F270K	27	35	1	14	0.9	5
DCY3216F330K	33	35	0.4	13	1.05	5
DCY3216F390K	39	40	2	11	3	5
DCY3216F470K	47	40	2	10	3.4	5
DCY3216F560K	56	40	2	9.5	3.8	4
DCY3216F680K	68	40	1	9.5	3	4
DCY3216F820K	82	40	1	9	3.4	4
DCY3216F101K	100	40	1	8	3.8	4

CHARACTERISTICS CURVES



FERRITE CHIP INDUCTORS



IMPEDANCE VS. FREQUENCY

