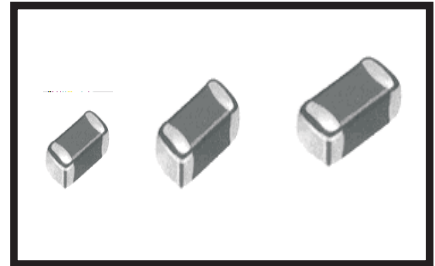


■ 鐵氧體疊層片式電感

FERRITE CHIP INDUCTORS(CMI)

OPERATING TEMP.	1005	-55~125°C
	1608	
	2012	-40~+85°C



● 特征 FEATURES

- 體積小
- 漏磁小，不產生耦合，可靠性高
- 無引綫，不產生跟踪性，適合高密度表面貼裝
- 優良的可焊性及耐熱衝擊性，適合波峰焊及回流焊
- Miniature volume.
- No cross coupling between inductors due to low magnetic shield and high reliability.
- No lead, ideal for high density SMT installation, with no directionality.
- Superior solderability and resistance to soldering heat, Ideal for wave or reflow soldering.

● 應用 APPLICATIONS

- VCD/DVD、數碼相機、電腦、數字電視、機頂盒
- VCD/DVD、digital cameras、personal computers etc.

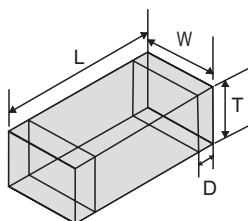
● 產品規格型號的表示方法 ORDERING CODE

<u>CMI</u>	<u>201209</u>	<u>V</u>	<u>47N</u>	<u>K</u>	<u>T</u>
①	②	③	④	⑤	⑥

① 產品代號 Product Code		② 規格尺寸(L×W×T) (mm) Dimensions		③ 材料代號 Material Code	④ 感量(μH) Inductance		⑤ 誤差 Tolerance		⑥ 包裝方式 Packaging Style	
CMI	疊層片式電感 Multilayer Chip Inductors	100505	1.0×0.5×0.5	U	實例 Example		K	±10%	T	卷帶盤裝 Tape & Reel
		160808	1.6×0.8×0.8	V	47N	0.047	M	±20%	B	散裝 Bulk
		201209	2.0×1.2×0.9	J	R10	0.10	N	±30%		
		201212	2.0×1.2×1.2	X	1R0	1.0				
		321609	3.2×1.6×0.9		N=0.0(nH) R=0.0(μH)					
		321611	3.2×1.6×1.1							
		322513	3.2×2.5×1.3							
		451616	4.5×1.6×1.6							
		453215	4.5×3.2×1.5							

• 外形尺寸 SHAPE AND DIMENSIONS

Unit:mm(inch)



Part No.	L	W	T	D
100505 (0402)	1.0±0.15 (0.040±0.006)	0.5±0.15 (0.020±0.006)	0.5±0.15 (0.020±0.006)	0.25±0.10 (0.010±0.004)
160808 (0603)	1.6±0.2 (0.063±0.008)	0.8±0.2 (0.031±0.008)	0.8±0.2 (0.031±0.008)	0.3±0.2 (0.01±0.008)
201209 (0805)	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)
201212 (0805)	2.0±0.2 (0.079±0.008)	1.2±0.2 (0.047±0.008)	1.2±0.2 (0.047±0.008)	0.5±0.3 (0.020±0.012)
321611 (1206)	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	1.1±0.2 (0.043±0.008)	0.5±0.3 (0.020±0.012)
321609 (1206)	3.2±0.2 (0.126±0.008)	1.6±0.2 (0.063±0.008)	0.9±0.2 (0.035±0.008)	0.5±0.3 (0.020±0.012)
322513 (1210)	3.2±0.2 (0.126±0.008)	2.5±0.2 (0.098±0.008)	1.3±0.2 (0.051±0.008)	0.5±0.3 (0.020±0.012)
451616 (1806)	4.5±0.2 (0.186±0.008)	1.6±0.2 (0.063±0.008)	1.6±0.2 (0.063±0.008)	0.5±0.3 (0.020±0.012)
453215 (1812)	4.5±0.2 (0.180±0.008)	3.2±0.2 (0.126±0.008)	1.5±0.2 (0.060±0.008)	0.5±0.3 (0.020±0.012)

• 電性能參數 ELECTRICAL CHARACTERISTICS

1005 TYPE

Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI100505V47NK	0.047	10	50	220	0.45	25
CMI100505V56NK	0.056	10	50	210	0.45	25
CMI100505V68NK	0.068	10	50	210	0.45	25
CMI100505V82NK	0.082	10	50	200	0.45	25
CMI100505VR10K	0.10	15	25	200	0.70	25
CMI100505VR12K	0.12	15	25	165	0.70	25
CMI100505VR15K	0.15	15	25	140	0.80	25
CMI100505VR18K	0.18	15	25	120	0.80	25
CMI100505VR22K	0.22	15	25	110	1.00	25
CMI100505VR27K	0.27	15	25	95	1.20	25
CMI100505VR33K	0.33	15	25	85	1.20	25
CMI100505VR39K	0.39	15	25	70	1.30	20
CMI100505VR47K	0.47	15	25	68	1.50	20
CMI100505VR56K	0.56	15	25	55	2.00	20
CMI100505VR68K	0.68	15	25	50	2.30	20
CMI100505VR82K	0.82	15	25	45	3.00	18
CMI100505U1R0K	1.0	20	10	40	0.90	25
CMI100505U1R2K	1.2	20	10	35	1.20	25
CMI100505U1R5K	1.5	20	10	30	1.30	20
CMI100505U1R8K	1.8	20	10	30	1.40	20
CMI100505U2R2K	2.2	20	10	28	1.70	20
CMI100505U2R7K	2.7	20	10	22	1.90	20
CMI100505U3R3K	3.3	20	10	20	2.00	20
CMI100505U3R9K	3.9	20	10	18	2.20	20
CMI100505U4R7K	4.7	20	10	15	2.50	18
CMI100505J5R6M	5.6	20	4	13	2.20	18
CMI100505J6R8M	6.8	20	4	11	2.40	18
CMI100505J8R2M	8.2	20	4	10	2.90	18
CMI100505J100M	10	20	2	9	3.10	10
CMI100505J120M	12	20	2	8	3.30	5
CMI100505J150M	15	20	1	8	3.50	5
CMI100505J180M	18	20	1	8	3.50	5

鐵氧體疊層片式電感  
FERRITE CHIP INDUCTORS

1608 TYPE

Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	I <sub>r</sub> (mA)Max
CMI160808V47NK	0.047	15	50	260	0.20	50
CMI160808V56NK	0.056	15	50	260	0.20	50
CMI160808V68NK	0.068	15	50	250	0.20	50
CMI160808V82NK	0.082	15	50	245	0.20	50
CMI160808VR10K	0.10	20	25	240	0.25	50
CMI160808VR12K	0.12	20	25	205	0.30	50
CMI160808VR15K	0.15	20	25	180	0.30	50
CMI160808VR18K	0.18	20	25	165	0.30	50
CMI160808VR22K	0.22	20	25	150	0.40	50
CMI160808VR27K	0.27	20	25	136	0.45	50
CMI160808VR33K	0.33	20	25	125	0.50	50
CMI160808VR39K	0.39	20	25	110	0.60	50
CMI160808VR47K	0.47	20	25	105	0.70	50
CMI160808VR56K	0.56	20	25	95	0.70	50
CMI160808VR68K	0.68	20	25	90	0.90	50
CMI160808VR82K	0.82	20	25	85	1.00	50
CMI160808U1R0K	1.0	25	10	75	0.50	25
CMI160808U1R2K	1.2	25	10	65	0.55	25
CMI160808U1R5K	1.5	25	10	60	0.70	25
CMI160808U1R8K	1.8	25	10	55	0.75	25
CMI160808U2R2K	2.2	25	10	50	0.80	25
CMI160808U2R7K	2.7	25	10	45	0.90	15
CMI160808U3R3K	3.3	25	10	40	1.00	15
CMI160808U3R9K	3.9	25	10	35	1.30	15
CMI160808X4R7K	4.7	25	10	33	1.50	15
CMI160808X5R6K	5.6	12	4	22	1.55	5
CMI160808J6R8K	6.8	12	4	20	1.55	5
CMI160808J8R2K	8.2	12	4	18	1.65	5
CMI160808J100K/M	10	20	2	17	1.75	3
CMI160808J120K/M	12	20	2	15	1.85	3
CMI160808J150K/M	15	20	1	14	2.50	1
CMI160808J180K/M	18	20	1	13	2.70	1
CMI160808J220K/M	22	20	1	11	3.00	1
CMI160808J270K/M	27	20	1	10	3.10	1
CMI160808J330K/M	33	20	1	9	3.30	1

## 2012 TYPE

Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI201209V47NK	0.047	25	50	320	0.15	300
CMI201209V56NK	0.056	25	50	320	0.15	300
CMI201209V68NK	0.068	25	50	280	0.20	300
CMI201209V82NK	0.082	25	50	280	0.20	300
CMI201209VR10K	0.10	20	25	235	0.20	250
CMI201209VR12K	0.12	20	25	220	0.25	250
CMI201209VR15K	0.15	20	25	200	0.25	250
CMI201209VR18K	0.18	20	25	185	0.30	250
CMI201209VR22K	0.22	20	25	170	0.30	250
CMI201209VR27K	0.27	20	25	150	0.40	250
CMI201209VR33K	0.33	20	25	145	0.40	250
CMI201209VR39K	0.39	25	25	135	0.50	200
CMI201209VR47K	0.47	25	.25	125	0.50	200
CMI201209VR56K	0.56	25	25	115	0.60	150
CMI201209VR68K	0.68	25	25	105	0.65	150
CMI201209VR82K	0.82	25	25	100	0.70	150
CMI201209U1R0K	1.0	35	10	75	0.40	50
CMI201209U1R2K	1.2	35	10	65	0.40	50
CMI201209U1R5K	1.5	35	10	60	0.40	50
CMI201209U1R8K	1.8	35	10	55	0.40	50
CMI201209U2R2K	2.2	35	10	50	0.60	50
CMI201209U2R7K	2.7	35	10	45	0.60	50
CMI201209U3R3K	3.3	35	10	41	0.60	50
CMI201209U3R9K	3.9	35	10	38	0.80	50
CMI201209U4R7K	4.7	35	10	35	0.90	30
CMI201209X5R6K	5.6	30	4	32	1.00	15
CMI201209X6R8K	6.8	30	4	29	1.05	15
CMI201209X8R2K	8.2	30	4	26	1.05	15
CMI201209X100K	10	30	2	24	1.15	15
CMI201209X120K	12	30	2	22	1.15	15
CMI201209J150K/M	15	25	1	19	1.15	5
CMI201209J180K/M	18	25	1	18	1.20	5
CMI201209J220K/M	22	25	1	16	1.20	5
CMI201209J270K/M	27	25	1	16	1.50	5
CMI201209J330K/M/N	33	25	1	16	1.50	5
CMI201212J390K/M/N	39	25	1	16	1.50	5
CMI201212J470K/M/N	47	25	1	15	1.70	5
CMI201212J560K/M/N	56	25	1	15	1.80	5

鐵氧體疊層片式電感  
FERRITE CHIP INDUCTORS

3216 TYPE

Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI321609V47NK	0.047	30	50	320	0.15	300
CMI321609V56NK	0.056	30	50	320	0.20	300
CMI321609V68NK	0.068	30	50	280	0.25	300
CMI321609V82NK	0.082	30	50	280	0.25	300
CMI321609VR10K	0.10	25	25	235	0.25	250
CMI321609VR12K	0.12	25	25	220	0.25	250
CMI321609VR15K	0.15	25	25	200	0.25	250
CMI321609VR18K	0.18	25	25	185	0.30	250
CMI321609VR22K	0.22	25	25	170	0.30	250
CMI321609VR27K	0.27	25	25	150	0.30	250
CMI321609VR33K	0.33	25	25	145	0.30	250
CMI321609VR39K	0.39	30	25	135	0.50	200
CMI321609VR47K	0.47	30	25	125	0.50	200
CMI321609VR56K	0.56	30	25	115	0.50	150
CMI321609VR68K	0.68	30	25	105	0.50	150
CMI321609VR82K	0.82	30	25	100	0.60	150
CMI321609U1R0K	1.0	35	10	75	0.30	100
CMI321609U1R2K	1.2	35	10	65	0.40	100
CMI321609U1R5K	1.5	35	10	60	0.40	50
CMI321609U1R8K	1.8	35	10	55	0.40	50
CMI321609U2R2K	2.2	35	10	50	0.50	50
CMI321609U2R7K	2.7	35	10	45	0.50	50
CMI321609U3R3K	3.3	35	10	41	0.50	50
CMI321609U3R9K	3.9	35	10	38	0.60	50
CMI321609U4R7K	4.7	35	10	35	0.65	25
CMI321609U5R6K	5.6	35	4	32	0.80	25
CMI321609X6R8K	6.8	35	4	29	0.80	25
CMI321609X8R2K	8.2	35	4	26	0.80	25
CMI321609X100K	10	35	2	24	0.80	25
CMI321609X120K	12	35	2	22	0.90	15
CMI321609J150K/M	15	30	1	19	1.00	5
CMI321609J180K/M	18	30	1	18	1.00	5
CMI321609J220K/M	22	30	1	16	1.20	5
CMI321609J270K/M	27	30	1	14	1.20	5
CMI321609J330K/M	33	30	1	13	1.30	5
CMI321609J390K/M	39	30	1	13	1.30	5
CMI321611J470K/M	47	30	1	12	1.60	5
CMI321611J560K/M	56	30	1	12	1.80	5
CMI321611J680K/M	68	30	1	11	2.00	5
CMI321611J820K/M	82	30	1	11	2.40	5
CMI321611J101K/M/N	100	30	1	8	3.00	5
CMI321611J121K/M/N	120	30	1	8	3.20	5

3225 TYPE

Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI322513U1R0K	1.0	40	10	70	0.20	500
CMI322513U1R2K	1.2	40	10	70	0.20	500
CMI322513U1R5K	1.5	40	10	70	0.30	500
CMI322513U1R8K	1.8	40	10	70	0.30	500
CMI322513U2R2K	2.2	40	10	50	0.30	500
CMI322513U2R7K	2.7	40	10	50	0.30	500
CMI322513U3R3K	3.3	40	10	50	0.40	500
CMI322513U3R9K	3.9	40	10	30	0.40	500
CMI322513U4R7K	4.7	40	10	30	0.50	500
CMI322513U5R6K	5.6	35	4	30	0.60	450
CMI322513X6R8K	6.8	35	4	20	0.60	450
CMI322513X8R2K	8.2	35	4	20	0.70	400
CMI322513X100K	10	35	2	20	0.70	300
CMI322513X120K	12	35	2	20	0.70	300
CMI322513J150K/M	15	35	1	20	0.70	200
CMI322513J180K/M	18	35	1	10	0.70	200
CMI322513J220K/M	22	35	1	10	0.75	150
CMI322513J270K/M	27	35	1	10	0.80	150
CMI322513J330K/M	33	35	1	10	1.10	100
CMI322513J390K/M	39	35	1	10	1.30	100
CMI322513J470K/M	47	35	1	10	1.50	50
CMI322513J560K/M	56	35	1	5	1.60	50
CMI322513J680K/M	68	35	1	5	1.80	30
CMI322513J820K/M	82	35	1	5	2.00	30
CMI322513J101K/M/N	100	35	1	5	2.00	20
CMI322513J121K/M/N	120	35	1	5	2.20	20
CMI322513J151K/M/N	150	35	1	5	2.40	20
CMI322513J181K/M/N	180	35	1	5	2.60	10
CMI322513J221K/M/N	220	35	1	5	2.80	10

## 鐵氧體疊層片式電感 FERRITE CHIP INDUCTORS

### 4516 TYPE

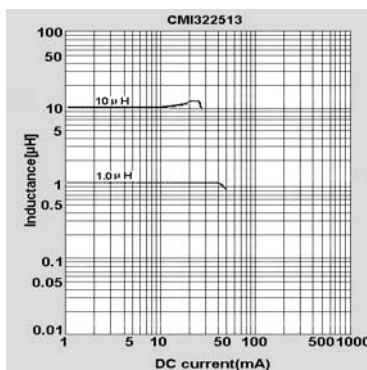
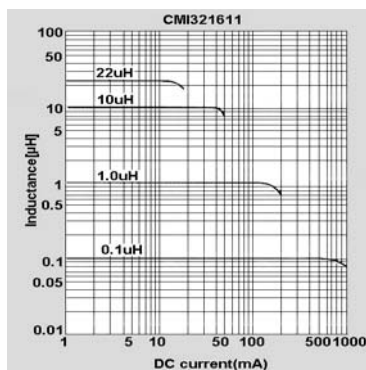
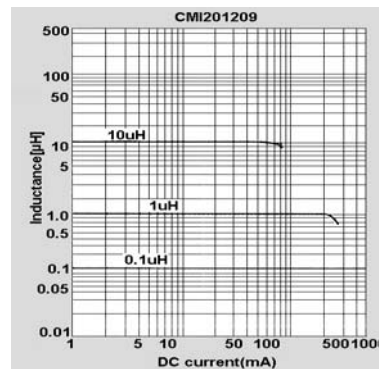
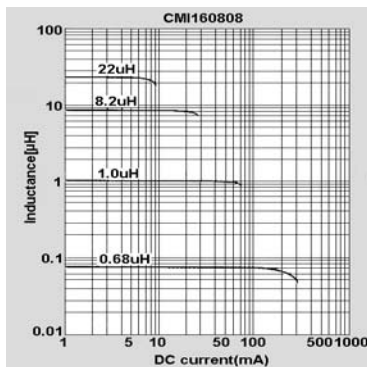
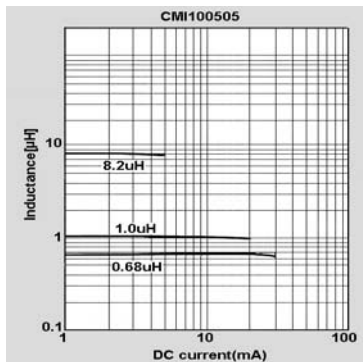
Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI451616U1R0K	1.0	40	10	80	0.25	500
CMI451616U1R2K	1.2	40	10	75	0.30	500
CMI451616U1R5K	1.5	40	10	60	0.30	500
CMI451616U1R8K	1.8	40	10	55	0.35	450
CMI451616U2R2K	2.2	40	10	50	0.35	400
CMI451616U2R7K	2.7	40	10	45	0.40	400
CMI451616U3R3K	3.3	40	10	40	0.45	400
CMI451616U3R9K	3.9	40	10	35	0.45	400
CMI451616U4R7K	4.7	40	10	30	0.50	300
CMI451616U5R6K	5.6	40	4	20	0.50	300
CMI451616U6R8K	6.8	35	4	20	0.60	300
CMI451616X8R2K	8.2	35	4	15	0.70	250
CMI451616X100K	10	35	2	15	0.70	250

### 4532 TYPE

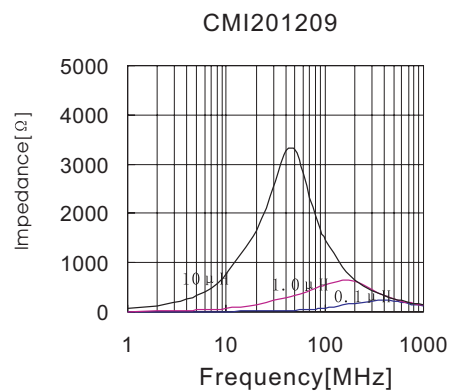
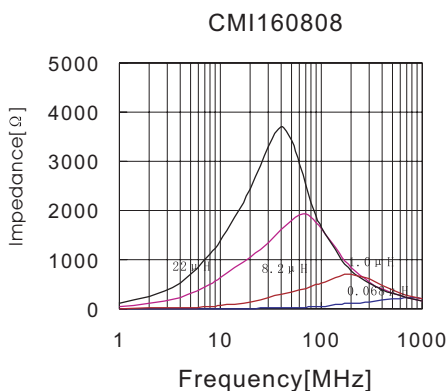
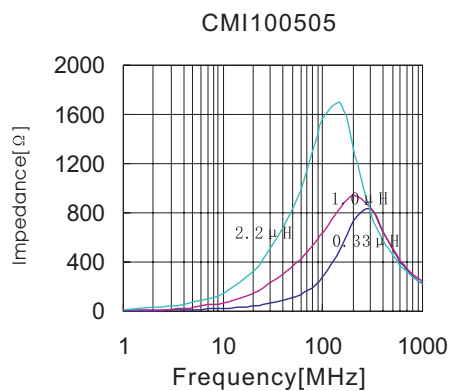
Part No.	Inductance ( $\mu$ H)	Q (Min)	Test Fre. (MHz)	SRF (MHz)Min	DCR ( $\Omega$ )Max	Ir (mA)Max
CMI453215U1R0K	1.0	35	10	50	0.55	650
CMI453215U1R2K	1.2	35	10	50	0.55	650
CMI453215U1R5K	1.5	35	10	45	0.55	600
CMI453215U1R8K	1.8	35	10	45	0.65	600
CMI453215U2R2K	2.2	35	10	40	0.65	500
CMI453215U2R7K	2.7	35	10	40	0.70	500
CMI453215U3R3K	3.3	35	10	35	0.75	500
CMI453215U3R9K	3.9	35	10	35	0.80	500
CMI453215U4R7K	4.7	30	10	25	0.90	500
CMI453215U5R6K	5.6	30	4	20	0.90	500
CMI453215U 6R8K	6.8	30	4	18	1.00	500
CMI453215X8R2K	8.2	30	4	17	1.00	450
CMI453215X 100K	10	30	2	16	1.00	450
CMI453215X120K	12	35	2	15	1.00	450
CMI453215J150K/M	15	35	1	14	1.00	400
CMI453215J180K/M	18	35	1	13	1.00	400
CMI453215J220K/M	22	35	1	12	1.30	300
CMI453215J270K/M	27	35	1	10	1.30	300
CMI453215J330K/M	33	40	1	10	1.50	250
CMI453215J390K/M	39	40	1	10	1.50	250
CMI453215J470K/M	47	40	1	8	1.65	250
CMI453215J560K/M	56	40	1	8	1.80	250
CMI453215J680K/M	68	40	1	6	2.00	200
CMI453215J820K/M	82	40	1	6	2.30	200
CMI453215J101K/M/N	100	40	1	6	2.30	150
CMI453215J121K/M/N	120	40	1	6	2.50	150
CMI453215J151K/M/N	150	40	1	5	3.00	150
CMI453215J181K/M/N	180	40	1	5	3.00	150
CMI453215J221K/M/N	220	40	1	5	3.50	100
CMI453215J271K/M/N	270	40	1	5	4.00	50
CMI453215J331K/M/N	330	40	1	3	5.00	50

■ 鐵氧體疊層片式電感

FERRITE CHIP INDUCTORS

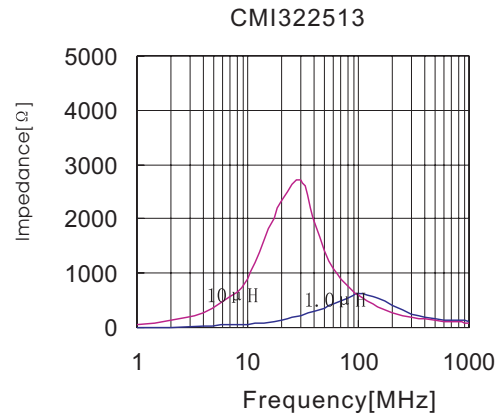
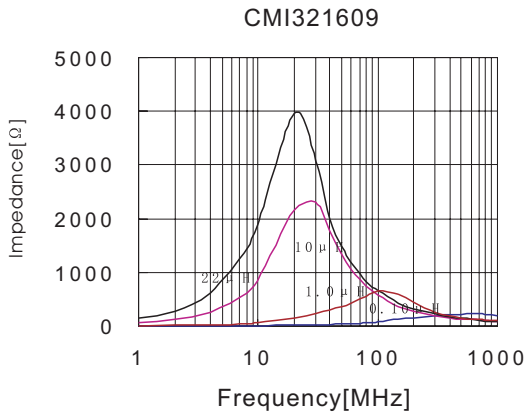


■ 阻抗－頻率特性 IMPEDANCE VS. FREQUENCY

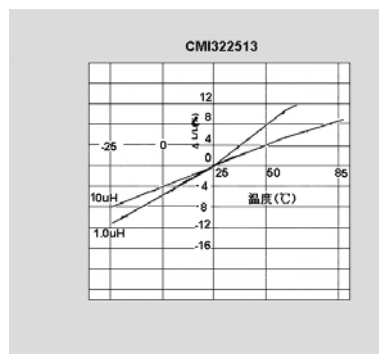
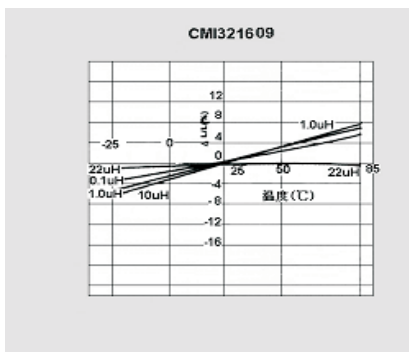
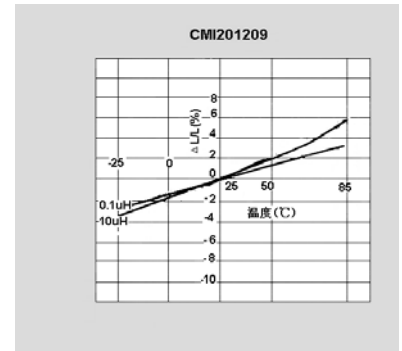
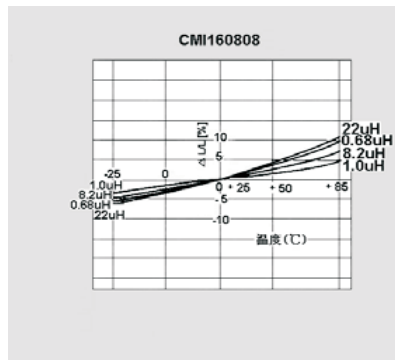
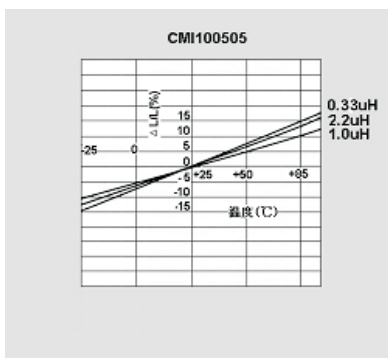




# 鐵氧體疊層片式電感 FERRITE CHIP INDUCTORS



## ■ 特性曲線 CHARACTERISTICS CURVES



■ 鐵氧體疊層片式電感

FERRITE CHIP INDUCTORS

