

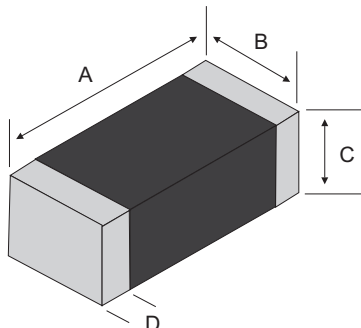
## ■ FEATURES

- 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.

## ■ 特征

- 体积小
- 漏磁小，不产生耦合，可靠性高
- 无引线，不产生跟踪性，适合高密度表面贴装。
- 优良的可焊性及耐热冲击性，适合波峰焊及回流焊

■ APPEARANCE AND DIMENSION (外观与尺寸)



Code	Dimension (unit:mm)			
	A	B	C	D
100505	$1.0 \pm 0.15$	$0.5 \pm 0.15$	$0.5 \pm 0.15$	$0.25 \pm 0.10$
160808	$1.6 \pm 0.2$	$0.8 \pm 0.2$	$0.8 \pm 0.2$	$0.3 \pm 0.2$
201209	$2.0 \pm 0.2$	$1.2 \pm 0.2$	$0.9 \pm 0.2$	$0.5 \pm 0.3$
201212	$2.0 \pm 0.2$	$1.2 \pm 0.2$	$1.2 \pm 0.2$	$0.5 \pm 0.3$
321611	$3.2 \pm 0.2$	$1.6 \pm 0.2$	$1.1 \pm 0.2$	$0.5 \pm 0.3$
321609	$3.2 \pm 0.2$	$1.6 \pm 0.2$	$0.9 \pm 0.2$	$0.5 \pm 0.3$
322513	$3.2 \pm 0.2$	$2.5 \pm 0.2$	$1.3 \pm 0.2$	$0.5 \pm 0.3$
451616	$4.5 \pm 0.2$	$1.6 \pm 0.2$	$1.6 \pm 0.2$	$0.5 \pm 0.3$
453215	$4.5 \pm 0.2$	$3.2 \pm 0.2$	$1.5 \pm 0.2$	$0.5 \pm 0.3$

## PART NUMBERING (型号命名方式)

- Product symbol (产品代码)

<u>CMI</u> ①	<u>201209</u> ②	<u>V</u> ③	<u>47N</u> ④	<u>K</u> ⑤	<u>A</u> ⑥
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① Product Code (产品代号)

② Dimension (规格尺寸)

Code	Dimension (unit:mm)			
	A	B	C	D
100505	1.0 ± 0.15	0.5 ± 0.15	0.5 ± 0.15	0.25 ± 0.10
160808	1.6 ± 0.2	0.8 ± 0.2	0.8 ± 0.2	0.3 ± 0.2
201209	2.0 ± 0.2	1.2 ± 0.2	0.9 ± 0.2	0.5 ± 0.3
201212	2.0 ± 0.2	1.2 ± 0.2	1.2 ± 0.2	0.5 ± 0.3
321611	3.2 ± 0.2	1.6 ± 0.2	1.1 ± 0.2	0.5 ± 0.3
321609	3.2 ± 0.2	1.6 ± 0.2	0.9 ± 0.2	0.5 ± 0.3
322513	3.2 ± 0.2	2.5 ± 0.2	1.3 ± 0.2	0.5 ± 0.3
451616	4.5 ± 0.2	1.6 ± 0.2	1.6 ± 0.2	0.5 ± 0.3
453215	4.5 ± 0.2	3.2 ± 0.2	1.5 ± 0.2	0.5 ± 0.3

③ Material Code (材料代码)

Code	U	V	J	X
Material	U料	V料	J料	X料

④ Nominal Inductance (标称电感量 (μH))

Symbol	3N3	10N	R10	1R0	100
Inductance	0.0033 μH	0.01 μH	0.1 μH	1 μH	10 μH

⑤ Tolerance (误差)

Symbol	S	D	J	K	M
Tolerance	± 0.3nH	± 0.5nH	± 5%	± 10%	± 20%

⑥ Packaging Style (包装方式)

T = Bulk (散装)

A = Tape Reel(编带盘装)

## ■ ELECTRICAL CHARACTERISTICS (电性能参数值)

## ● CMI1005 Series (0402系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ ) Max.	I <sub>R</sub> (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
CMI100505UR39K	0.39	15	25	70	1.30	20
CMI100505UR47K	0.47	15	25	68	1.50	20
CMI100505UR56K	0.56	15	25	55	2.00	20
CMI100505UR68K	0.68	15	25	50	2.30	20
CMI100505UR82K	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
CMI100505X1R8K	1.8	20	10	30	1.40	20
CMI100505X2R2K	2.2	20	10	28	1.70	20
CMI100505X2R7K	2.7	20	10	22	1.90	20
CMI100505X3R3K	3.3	20	10	20	2.00	20
CMI100505X3R9K	3.9	20	10	18	2.20	20
CMI100505X4R7K	4.7	20	10	15	2.50	18
CMI100505J5R6K	5.6	20	4	13	2.20	18
CMI100505J6R8K	6.8	20	4	11	2.40	18
CMI100505J8R2K	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

## ● CMI1608 Series (0603系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ ) Max.	I <sub>R</sub> (mA) Max.
CMI160808V47NK	0.047	15	50	260	0.30	50
CMI160808V56NK	0.056	15	50	260	0.30	50
CMI160808V68NK	0.068	15	50	250	0.30	50
CMI160808V82NK	0.082	15	50	245	0.30	50
CMI160808VR10K	0.10	20	25	240	0.30	50
CMI160808VR12K	0.12	20	25	205	0.35	50
CMI160808VR15K	0.15	20	25	180	0.35	50
CMI160808VR18K	0.18	20	25	165	0.40	50
CMI160808VR22K	0.22	20	25	150	0.50	50
CMI160808VR27K	0.27	20	25	136	0.55	50
CMI160808VR33K	0.33	20	25	125	0.60	35
CMI160808VR39K	0.39	20	25	110	0.70	35
CMI160808VR47K	0.47	20	25	105	0.80	35
CMI160808VR56K	0.56	20	25	95	0.80	35
CMI160808VR68K	0.68	20	25	90	0.90	35
CMI160808VR82K	0.82	20	25	85	1.20	35
CMI160808U1R0K	1.0	30	10	75	0.60	25
CMI160808U1R2K	1.2	30	10	65	0.80	25
CMI160808U1R5K	1.5	30	10	60	0.85	25
CMI160808U1R8K	1.8	30	10	55	0.95	25
CMI160808U2R2K	2.2	30	10	50	1.00	25
CMI160808U2R7K	2.7	30	10	45	0.15	15
CMI160808U3R3K	3.3	30	10	40	1.30	15
CMI160808U3R9K	3.9	30	10	35	0.30	15
CMI160808X4R7K	4.7	30	10	33	1.50	15
CMI160808X5R6K	5.6	35	4	22	1.55	5
CMI160808X6R8K	6.8	35	4	20	1.55	5
CMI160808J8R2K	8.2	35	4	18	1.65	5
CMI160808J100K	10	30	2	17	1.75	3
CMI160808J120K	12	30	2	15	1.85	3
CMI160808J150K	15	20	1	14	2.00	1
CMI160808J180M	18	20	1	13	2.10	1
CMI160808J220M	22	20	1	11	2.10	1
CMI160808J270M	27	20	1	10	2.20	1
CMI160808J330M	33	20	1	9	2.50	1

## ● CMI2012 Series (0805系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ )Max.	I <sub>R</sub> (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	25	25	235	0.20	250
CMI201209VR12K	0.12	25	25	220	0.25	250
CMI201209VR15K	0.15	25	25	200	0.25	250
CMI201209VR18K	0.18	25	25	185	0.30	250
CMI201209VR22K	0.22	25	25	170	0.30	250
CMI201209VR27K	0.27	25	25	150	0.40	250
CMI201209VR33K	0.33	25	25	145	0.40	250
CMI201209VR39K	0.39	30	25	135	0.50	200
CMI201209VR47K	0.47	30	25	125	0.50	200
CMI201209VR56K	0.56	30	25	115	0.60	150
CMI201209VR68K	0.68	30	25	105	0.70	150
CMI201209VR82K	0.82	30	25	100	0.80	150
CMI201209U1R0K	1.0	45	10	75	0.40	100
CMI201209U1R2K	1.2	45	10	65	0.50	100
CMI201209U1R5K	1.5	45	10	60	0.40	50
CMI201209U1R8K	1.8	45	10	55	0.50	50
CMI201209U2R2K	2.2	45	10	50	0.60	50
CMI201209U2R7K	2.7	45	10	45	0.60	50
CMI201209U3R3K	3.3	45	10	41	0.70	50
CMI201209U3R9K	3.9	45	10	38	0.80	50
CMI201209U4R7K	4.7	45	10	35	0.90	25
CMI201209X5R6K	5.6	50	4	32	1.00	25
CMI201209X6R8K	6.8	50	4	29	1.05	25
CMI201209X8R2K	8.2	50	4	26	1.05	25
CMI201209X100K	10	50	2	24	1.10	25
CMI201209X120K	12	50	2	22	1.10	15
CMI201209J150K	15	30	1	19	1.10	5
CMI201209J180K	18	30	1	18	1.10	5
CMI201209J220K	22	30	1	16	1.20	5
CMI201209J270K	27	30	1	16	1.50	5
CMI201212J330M	33	30	1	16	1.50	5
CMI201212J390M	39	35	1	16	1.50	5
CMI201212J470M	47	35	1	15	1.60	5
CMI201212J560M	56	35	1	15	1.80	5

## ● CMI3216 Series (1206系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ )Max.	I <sub>R</sub> (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	30	25	235	0.25	250
CMI321609VR12K	0.12	30	25	220	0.30	250
CMI321609VR15K	0.15	30	25	200	0.40	250
CMI321609VR18K	0.18	30	25	185	0.40	250
CMI321609VR22K	0.22	30	25	170	0.40	250
CMI321609VR27K	0.27	30	25	150	0.50	250
CMI321609VR33K	0.33	30	25	145	0.50	250
CMI321609VR39K	0.39	35	25	135	0.60	200
CMI321609VR47K	0.47	35	25	125	0.60	200
CMI321609VR56K	0.56	35	25	115	0.60	150
CMI321609VR68K	0.68	35	25	105	0.60	150
CMI321609VR82K	0.82	35	25	100	0.70	150
CMI321609U1R0K	1.0	45	10	75	0.40	100
CMI321609U1R2K	1.2	45	10	65	0.50	100
CMI321609U1R5K	1.5	45	10	60	0.50	50
CMI321609U1R8K	1.8	45	10	55	0.50	50
CMI321609U2R2K	2.2	45	10	50	0.60	50
CMI321609U2R7K	2.7	45	10	45	0.60	50
CMI321609U3R3K	3.3	45	10	41	0.60	50
CMI321609U3R9K	3.9	45	10	38	0.65	50
CMI321609U4R7K	4.7	45	10	35	0.70	25
CMI321609X5R6K	5.6	50	4	32	0.80	25
CMI321609X6R8K	6.8	50	4	29	0.80	25
CMI321609X8R2K	8.2	50	4	26	0.80	25
CMI321609X100K	10	50	2	24	0.80	25
CMI321609X120K	12	50	2	22	0.90	15
CMI321609X150K	15	35	1	19	1.00	5
CMI321609J180K	18	35	1	18	1.00	5
CMI321609J220K	22	35	1	16	1.00	5
CMI321609J270K	27	35	1	14	1.00	5
CMI321609J330M	33	35	1	13	1.15	5
CMI321609J390M	39	40	1	13	1.20	5
CMI321611J470M	47	40	1	12	1.40	5
CMI321611J560M	56	40	1	12	1.60	5
CMI321611J680M	68	40	1	11	1.80	5
CMI321611J820M	82	40	1	11	2.20	5
CMI321611J101M	100	40	1	9	2.60	5
CMI321611J121M	120	30	1	9	2.90	5

## ● CMI3225 Series (1210系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ ) Max.	I <sub>R</sub> (mA) Max.
CMI322513U1R0K	1.0	40	10	60	0.35	600
CMI322513U1R2K	1.2	40	10	55	0.35	600
CMI322513U1R5K	1.5	40	10	50	0.40	500
CMI322513U1R8K	1.8	40	10	40	0.40	500
CMI322513U2R2K	2.2	40	10	40	0.40	500
CMI322513U2R7K	2.7	40	10	40	0.40	500
CMI322513U3R3K	3.3	40	10	40	0.45	500
CMI322513U3R9K	3.9	40	10	30	0.45	500
CMI322513U4R7K	4.7	40	10	30	0.50	500
CMI322513U5R6K	5.6	35	10	25	0.60	450
CMI322513U6R8K	6.8	35	4	25	0.60	450
CMI322513U8R2K	8.2	35	4	20	0.70	400
CMI322513X100K	10	35	2	20	0.70	400
CMI322513X120K	12	35	2	20	0.70	400
CMI322513X150K	15	35	1	14	0.70	300
CMI322513X180K	18	35	1	14	0.70	300
CMI322513J220K	22	35	1	14	0.75	250
CMI322513J270K	27	35	1	12	0.75	250
CMI322513J330M	33	35	1	12	0.80	250
CMI322513J390M	39	35	1	12	0.80	250
CMI322513J470M	47	35	1	10	0.85	200
CMI322513J560M	56	35	1	10	1.00	200
CMI322513J680M	68	35	1	8	1.20	150
CMI322513J820M	82	35	1	8	1.30	150
CMI322513J101M	100	35	1	6	1.40	150
CMI322513J121M	120	35	1	6	1.50	150
CMI322513J151M	150	35	1	6	1.50	100
CMI322513J181M	180	35	1	5	1.50	50
CMI322513J221M	220	35	1	5	1.80	50
CMI322513J271M	270	35	1	5	2.00	50



## ● CMI4516 Series (1806系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ ) Max.	I <sub>R</sub> (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	0.40	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
CMI451616U8R2K	8.2	35	4	15	0.70	250
CMI451616U100K	10	35	2	15	0.70	250

## ● CMI4532 Series (1812系列)

Part No.	Inductance ( $\mu$ H)	Q (Min.)	Test Frequency (MHz)	Self-Resonant Frequency (MHz) Min.	DC Resistance ( $\Omega$ ) Max.	I <sub>R</sub> (mA) Max.
CMI453215U1R0K	1.0	35	10	50	0.60	650
CMI453215U1R2K	1.2	35	10	50	0.60	650
CMI453215U1R5K	1.5	35	10	45	0.60	600
CMI453215U1R8K	1.8	35	10	45	0.70	600
CMI453215U2R2K	2.2	35	10	40	0.70	500
CMI453215U2R7K	2.7	35	10	40	0.75	500
CMI453215U3R3K	3.3	35	10	35	0.80	500
CMI453215U3R9K	3.9	35	10	35	0.90	500
CMI453215U4R7K	4.7	30	10	25	0.95	500
CMI453215U5R6K	5.6	30	4	20	0.95	500
CMI453215U6R8K	6.8	30	4	18	1.00	500
CMI453215U8R2K	8.2	30	2	17	0.15	450
CMI453215U100K	10	30	2	16	1.25	450
CMI453215U120K	12	35	2	15	1.40	400
CMI453215J150K	15	35	1	14	1.45	400
CMI453215J180K	18	35	1	13	1.50	400
CMI453215J220K	22	35	1	12	1.50	300
CMI453215J270K	27	35	1	10	1.50	300
CMI453215J330M	33	40	1	10	1.50	250
CMI453215J390M	39	40	1	10	1.50	250
CMI453215J470M	47	40	1	8	1.65	250
CMI453215J560M	56	40	1	8	1.80	250
CMI453215J680M	68	40	1	6	2.00	200
CMI453215J820M	82	40	1	6	2.00	200
CMI453215J101M	100	40	1	6	2.00	150
CMI453215J121M	120	40	1	6	2.50	150
CMI453215J151M	150	40	1	5	3.00	150
CMI453215J181M	180	40	1	5	3.00	150
CMI453215J221M	220	40	1	5	3.20	100
CMI453215J271M	270	40	1	5	3.50	50
CMI453215J331M	330	40	1	3	3.50	50