

# Ferrite Multilayer Chip Inductor

-----KCFI Series

## Feature

1. Internal printed coil structure creates a closed magnetic circuit which acts as a magnetic shield eliminating crosstalk, thus permitting higher mounting densities;
2. Monolithic structure yields high reliability;
3. Excellent solderability and high heat resistant permit flow or reflow soldering.

## Application

Any general circuit of portable equipment in which compact size and high mounting densities are required.

## Available type

**KCFI1005:** 0.047  $\mu$ H – 12.0  $\mu$ H

**KCFI1608:** 0.047  $\mu$ H – 33  $\mu$ H

**KCFI2012:** 0.047  $\mu$ H - 82  $\mu$ H

**KCFI3216:** 0.047  $\mu$ H - 120  $\mu$ H

**KCFI4532:** 0.068  $\mu$ H - 330  $\mu$ H



## Identification

<b>KCFI</b>	<b>1005</b>	<b>M</b>	<b>1R8</b>	<b>K</b>	<b>T</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>

1. Series name
2. Type
3. Material code
4. Inductance (68N: 68nH; R10: 0.1  $\mu$ H; 100: 10  $\mu$ H)
5. Tolerance (S:  $\pm$  0.3nH; D:  $\pm$  0.5nH; J:  $\pm$  5%; K:  $\pm$  10%; M:  $\pm$  20%)
6. Package (T: Taping B: bulk)

## KCFI 1005 TYPE

Kingcera P/N	L ( $\mu$ H)	Tolerance	Q min	L.Q test Freq. (MHz)	SRF <sub>min</sub> (MHz)	DCR( ) max	Rated current (mA) max
KCFI1005G47N	0.047	$\pm$ 20% or $\pm$ 10%	10	50	220	0.45	50
KCFI1005G68N	0.068		10	50	210	0.45	50
KCFI1005G82N	0.082		10	50	200	0.45	50
KCFI1005GR10	0.10		15	25	200	0.80	50
KCFI1005GR12	0.12		15	25	165	0.80	25
KCFI1005GR15	0.15		15	25	140	0.90	25
KCFI1005GR18	0.18		15	25	120	0.90	25
KCFI1005GR22	0.22		15	25	110	1.20	25
KCFI1005GR27	0.27		15	25	95	1.20	25
KCFI1005GR33	0.33		15	25	85	1.25	20
KCFI1005GR39	0.39		15	25	70	1.50	20
KCFI1005GR47	0.47		15	25	68	2.00	20
KCFI1005GR56	0.56		15	25	55	2.35	20
KCFI1005GR68	0.68		15	25	50	2.55	20
KCFI1005GR82	0.82		15	25	45	3.15	20
KCFI1005M1R0	1.0		20	10	40	1.50	15
KCFI1005M1R2	1.2		20	10	35	1.60	15
KCFI1005M1R5	1.5		20	10	30	1.90	15
KCFI1005M1R8	1.8		20	10	30	1.90	15
KCFI1005M2R2	2.2		20	10	28	2.00	15
KCFI1005M2R7	2.7	20	10	22	2.00	15	
KCFI1005M3R3	3.3	20	10	18	2.00	15	
KCFI1005M3R9	3.9	20	10	18	2.2	15	
KCFI1005M4R7	4.7	20	10	15	2.5	15	
KCFI1005M5R6	5.6	20	4	13	2.2	15	
KCFI1005M6R8	6.8	20	4	11	2.5	15	
KCFI1005M8R2	8.2	20	4	10	2.9	15	
KCFI1005M100	10.0	20	2	9	3.0	10	

## KCFI 1608 TYPE

Kingcera P/N	L ( $\mu$ H)	Tolerance	Q min	L.Q test Freq. (MHz)	SRF min (MHz)	DCR( ) max	Rated current (mA) max
KCFI1608GR15	0.15		15	25	180	0.60	50
KCFI1608GR18	0.18		15	25	165	0.60	50
KCFI1608GR22	0.22		15	25	150	0.80	50
KCFI1608GR27	0.27		15	25	136	0.80	50
KCFI1608GR33	0.33		15	25	125	0.85	35
KCFI1608GR39	0.39		15	25	110	1.00	35
KCFI1608GR47	0.47		15	25	105	1.35	35
KCFI1608GR56	0.56		15	25	95	1.55	35
KCFI1608GR68	0.68		15	25	90	1.70	35
KCFI1608GR82	0.82		15	25	85	2.10	35
KCFI1608M1R0	1.0		35	10	75	0.60	25
KCFI1608M1R2	1.2		35	10	65	0.80	25
KCFI1608M1R5	1.5		35	10	60	0.80	25
KCFI1608M1R8	1.8		35	10	55	0.95	25
KCFI1608M2R2	2.2		35	10	50	1.15	15
KCFI1608M2R7	2.7		35	10	45	1.35	15
KCFI1608M3R3	3.3		35	10	40	1.55	15
KCFI1608M3R9	3.9		35	10	36	1.70	15
KCFI1608M4R7	4.7		35	10	33	2.10	15
KCFI1608K5R6	5.6		35	4	22	1.55	5
KCFI1608K6R8	6.8		35	4	20	1.70	5
KCFI1608K8R2	8.2		35	4	18	2.10	5
KCFI1608K100	10.0		35	2	17	2.55	5
KCFI1608K120	12.0		35	2	15	2.75	5
KCFI1608N150	15.0		20	1	14	1.70	1
KCFI1608N180	18.0		20	1	13	1.85	1
KCFI1608N220	22.0		20	1	11	2.10	1

## KCFI 2012 TYPE

Kingcera P/N	L ( $\mu$ H)	Tolerance	Q min	L.Q test Freq. (MHz)	SRF min (MHz)	DCR( ) max	Rated current (mA) max
KCFI2012GR15	0.15		20	25	200	0.40	250
KCFI2012GR18	0.18		20	25	185	0.40	250
KCFI2012GR22	0.22		20	25	170	0.50	250
KCFI2012GR27	0.27		20	25	150	0.50	250
KCFI2012GR33	0.33		20	25	145	0.55	250
KCFI2012GR39	0.39		25	25	135	0.65	200
KCFI2012GR47	0.47		25	25	125	0.65	200
KCFI2012GR56	0.56		25	25	115	0.75	150
KCFI2012GR68	0.68		25	25	105	0.80	150
KCFI2012GR82	0.82		25	25	100	1.00	150
KCFI2012M1R0	1.0		45	10	75	0.40	50
KCFI2012M1R2	1.2		45	10	65	0.50	50
KCFI2012M1R5	1.5		45	10	60	0.50	50
KCFI2012M1R8	1.8		45	10	55	0.60	50
KCFI2012M2R2	2.2		45	10	50	0.65	30
KCFI2012M2R7	2.7		45	10	45	0.75	30
KCFI2012M3R3	3.3		45	10	41	0.80	30
KCFI2012M3R9	3.9		45	10	38	0.90	30
KCFI2012M4R7	4.7		45	10	35	1.00	30
KCFI2012K5R6	5.6		50	4	32	0.90	15
KCFI2012K6R8	6.8		50	4	29	1.00	15
KCFI2012K8R2	8.2		50	4	26	1.10	15
KCFI2012K100	10		50	2	24	1.20	15
KCFI2012K120	12		50	2	22	1.30	15
KCFI2012N150	15		30	1	19	0.80	5
KCFI2012N180	18		30	1	18	0.90	5
KCFI2012N220	22		30	1	16	1.10	5
KCFI2012N270	27		30	1	14	1.20	5
KCFI2012N330	33		30	1	13	1.30	5

**KCFI 3216 TYPE**

Kingcera PN	L ( $\mu$ H)	Tolerance	Q min	L.Q test Freq. (MHz)	SRFmin (MHz)	DCR( ) max	Rated current (mA) max
KCFI3216G47N	0.047	± 20% or ± 10%	20	50	320	0.15	400
KCFI3216G68N	0.068		20	50	280	0.25	400
KCFI3216GR10	0.10		20	25	235	0.25	300
KCFI3216GR12	0.12		20	25	220	0.30	300
KCFI3216GR15	0.15		20	25	200	0.30	300
KCFI3216GR18	0.18		20	25	185	0.40	250
KCFI3216GR22	0.22		20	25	170	0.40	250
KCFI3216GR27	0.27		20	25	150	0.50	250
KCFI3216GR33	0.33		20	25	145	0.60	250
KCFI3216GR39	0.39		25	25	135	0.50	200
KCFI3216GR47	0.47		25	25	125	0.60	200
KCFI3216GR56	0.56		25	25	115	0.70	150
KCFI3216GR68	0.68		25	25	105	0.80	150
KCFI3216GR82	0.82		25	25	100	0.90	150
KCFI3216M1R0	1.0		45	10	75	0.40	100
KCFI3216M1R2	1.2		45	10	65	0.50	100
KCFI3216M1R5	1.5		45	10	60	0.50	50
KCFI3216M1R8	1.8		45	10	55	0.50	50
KCFI3216M2R2	2.2		45	10	50	0.60	50
KCFI3216M2R7	2.7		45	10	45	0.60	50
KCFI3216M3R3	3.3		45	10	41	0.70	50
KCFI3216M3R9	3.9		45	10	38	0.80	50
KCFI3216M4R7	4.7		45	10	35	0.90	50
KCFI3216K5R6	5.6		50	4	32	0.70	25
KCFI3216K6R8	6.8		50	4	29	0.80	25
KCFI3216K8R2	8.2		50	4	26	0.90	25
KCFI3216K100	10.0		50	2	24	1.00	25
KCFI3216K120	12.0		50	2	22	1.05	15
KCFI3216N150	15.0		35	1	19	0.70	5
KCFI3216N180	18.0		35	1	18	0.70	5
KCFI3216N220	22.0		35	1	16	0.90	5
KCFI3216N270	27.0		35	1	14	0.90	5
KCFI3216N330	33.0		35	1	13	1.05	5
KCFI3216N390	39.0		40	1	11	1.20	5
KCFI3216N470	47.0		40	1	10	1.40	5
KCFI3216N560	56.0		40	1	10	1.60	5
KCFI3216N680	68.0		40	1	10	1.80	5
KCFI3216N820	82.0		40	1	10	2.20	5
KCFI3216N101	100		40	1	10	2.60	5
KCFI3216N121	120		30	1	9	2.90	5