PCA ELECTRONICS INC.

High Frequency Chip Inductors
EPICF Type

RoHS

Applications :
Filtering of EMI from signal in electronic modules, hand held meters, modems, base stations, digital cameras, notebooks, network servers, PDA's, mobile phones, etc.

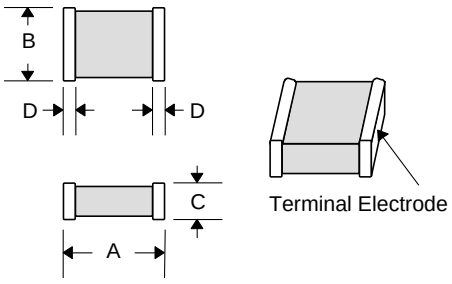
Product Identification

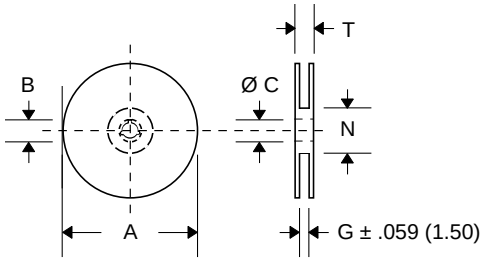
EPICF □□□□□□ □□□ □

- Tolerance
- Inductance
- Dimensions
- Product Code

□ : Inductance Tolerance
(S = ± 0.3 nH, D = ± 0.5 nH, J = ± 5% K = ± 10%, M = ± 20%)

Shape and Dimension





Package Dimensions

Type	A Inches (mm)	B Inches (mm)	C Inches (mm)	D Inches (mm)
EPICF100505	.039 ± .004 (1.00 ± .100)	.020 ± .004 (.500 ± .100)	.020 ± .004 (.500 ± .100)	.010 ± .004 (.250 ± .100)
EPICF160808	.062 ± .008 (1.60 ± .200)	.031 ± .006 (.800 ± .200)	.031 ± .006 (.800 ± .200)	.011 ± .008 (.300 ± .200)
EPICF201209	.079 ± .008 (2.00 ± .200)	.047 ± .008 (1.20 ± .200)	.035 ± .008 (.900 ± .200)	.020 ± .011 (.500 ± .300)
EPICF201212	.079 ± .008 (2.00 ± .200)	.047 ± .008 (1.20 ± .200)	.047 ± .008 (1.20 ± .200)	.020 ± .011 (.500 ± .300)

Reel Dimensions

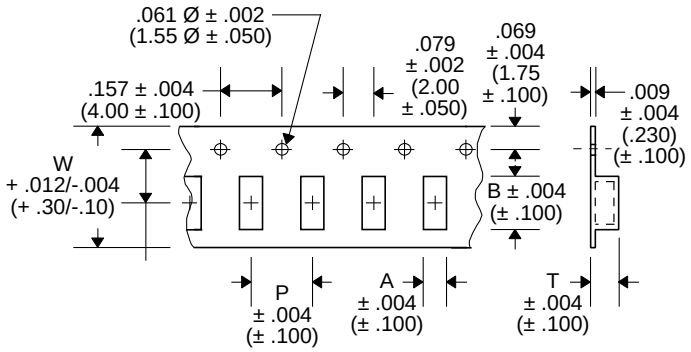
(Material : Paper, Plastic)

Type	8mm	12mm
A	7.00 ± .079 (178.00 ± 2.00)	7.00 ± .079 (178.00 ± 2.00)
B	0.827 ± .031 (21.00 ± .800)	0.827 ± .031 (21.00 ± .800)
C	0.512 ± .031 (13.00 ± .800)	0.512 ± .031 (13.00 ± .800)
G	0.394 (10.00)	0.551 (14.00)
N	2.95 (75.00)	2.95 (75.00)
T	0.492 (12.50)	0.650 (16.50)

Tape Dimensions & Packaging Quantities

(Carrier Tape Material : Pollystrene)

Type	A Inches (mm)	B Inches (mm)	W Inches (mm)	P Inches (mm)	T Inches (mm)	Chip/Reel Quantity
EPICF100505	.025 (.650)	.045 (1.15)	.315 (8.00)	.079 (2.00)	.027 (.600)	8000
EPICF160808	.043 (1.10)	.074 (1.90)	.315 (8.00)	.157 (4.00)	.037 (.950)	4000
EPICF201209	.056 (1.42)	.088 (2.24)	.315 (8.00)	.157 (4.00)	.041 (1.04)	4000
EPICF201212	.059 (1.50)	.090 (2.30)	.315 (8.00)	.157 (4.00)	.063 (1.60)	2000



PCA ELECTRONICS, INC.
16799 SCHOENBORN ST.
NORTH HILLS, CA 91343

TEL: (818) 892-0761
FAX: (818) 894-5791

High Frequency Chip Inductors
EPICF Type

RoHS

Electrical Characteristics

Part Number	Inductance (nH) @ 100 MHz	Q (Min.)	Q Typical (MHz) 100	300	500	800	1000	SRF (MHz) Min.	Typ.	DC Resistance (Ω Max.) Max.	Typ.	Rated Current (mA Max.)
EPICF100505 ☐ 1N0S	1.0	8	11	20	26	34	39	10000	>13000	0.12	0.04	300
EPICF100505 ☐ 1N2S	1.2	8	11	20	26	34	39	10000	>13000	0.12	0.04	300
EPICF100505 ☐ 1N5S	1.5	8	11	20	26	34	39	6000	>13000	0.13	0.05	300
EPICF100505 ☐ 1N8S	1.8	8	11	18	24	30	35	6000	11000	0.14	0.06	300
EPICF100505 ☐ 2N2S	2.2	8	10	17	24	29	35	6000	10000	0.16	0.07	300
EPICF100505 ☐ 2N7S	2.7	8	10	17	23	29	34	6000	9000	0.17	0.08	300
EPICF100505 ☐ 3N3 ☐	3.3	8	10	17	23	28	34	6000	8000	0.19	0.10	300
EPICF100505 ☐ 3N9 ☐	3.9	8	10	17	23	28	33	4000	7000	0.22	0.12	300
EPICF100505 ☐ 4N7 ☐	4.7	8	10	17	23	28	33	4000	6000	0.24	0.12	300
EPICF100505 ☐ 5N6 ☐	5.6	8	10	17	22	28	33	4000	5700	0.27	0.15	300
EPICF100505 ☐ 6N8 ☐	6.8	8	10	16	22	27	33	3900	5500	0.32	0.17	250
EPICF100505 ☐ 8N2 ☐	8.2	8	10	17	22	28	32	3600	4900	0.37	0.21	250
EPICF100505 ☐ 10N ☐	10.0	8	10	17	22	30	32	3200	4300	0.42	0.23	250
EPICF100505 ☐ 12N ☐	12.0	8	11	18	24	31	34	2700	3900	0.50	0.28	250
EPICF100505 ☐ 15N ☐	15.0	8	11	18	24	30	33	2300	3500	0.55	0.31	250
EPICF100505 ☐ 18N ☐	18.0	8	11	18	24	30	32	2100	3100	0.65	0.35	200
EPICF100505 ☐ 22N ☐	22.0	8	11	18	24	30	31	1900	2800	0.80	0.42	200
EPICF100505 ☐ 27N ☐	27.0	8	11	18	23	27	29	1600	2300	0.90	0.47	200
EPICF100505 ☐ 33N ☐	33.0	8	11	18	22	25	25	1300	1900	1.00	0.50	200
EPICF100505 ☐ 39N ☐	39.0	8	11	18	22	24	23	1200	1700	1.20	0.52	150
EPICF100505 ☐ 47N ☐	47.0	8	11	18	21	23	21	1000	1500	1.30	0.58	150
EPICF160808 ☐ 1N0S	1.0	8	14	30	40	70	90	10000	>13000	0.05	0.015	300
EPICF160808 ☐ 1N2S	1.2	8	14	30	40	70	90	10000	>13000	0.05	0.015	300
EPICF160808 ☐ 1N5S	1.5	8	14	26	34	47	50	6000	>13000	0.10	0.03	300
EPICF160808 ☐ 1N8S	1.8	8	10	18	24	30	34	6000	>13000	0.10	0.06	300
EPICF160808 ☐ 2N2S	2.2	8	12	22	29	37	40	6000	12000	0.10	0.06	300
EPICF160808 ☐ 2N7S	2.7	10	13	24	32	41	45	6000	11000	0.10	0.06	300
EPICF160808 ☐ 3N3 ☐	3.3	10	14	25	33	42	47	6000	9000	0.12	0.06	300
EPICF160808 ☐ 3N9 ☐	3.9	10	13	25	33	42	46	6000	8000	0.14	0.07	300
EPICF160808 ☐ 4N7 ☐	4.7	10	13	25	33	42	47	4000	6500	0.16	0.08	300
EPICF160808 ☐ 5N6 ☐	5.6	10	14	25	33	42	46	4000	5800	0.18	0.09	300
EPICF160808 ☐ 6N8 ☐	6.8	10	14	25	33	43	47	4000	5600	0.22	0.11	300
EPICF160808 ☐ 8N2 ☐	8.2	10	14	26	34	44	48	3500	5200	0.24	0.13	300
EPICF160808 ☐ 10N ☐	10.0	12	14	26	34	43	47	3400	4600	0.26	0.16	300
EPICF160808 ☐ 12N ☐	12.0	12	14	27	35	45	49	2600	4000	0.28	0.17	300
EPICF160808 ☐ 15N ☐	15.0	12	15	28	37	46	51	2300	3400	0.32	0.20	300
EPICF160808 ☐ 18N ☐	18.0	12	15	27	36	44	48	2000	3000	0.35	0.21	300
EPICF160808 ☐ 22N ☐	22.0	12	16	28	36	44	47	1600	2900	0.40	0.25	300
EPICF160808 ☐ 27N ☐	27.0	12	16	29	37	45	46	1400	2200	0.45	0.28	300
EPICF160808 ☐ 33N ☐	33.0	12	17	31	40	46	47	1200	1800	0.55	0.35	300
EPICF160808 ☐ 39N ☐	39.0	12	18	31	39	44	44	1100	1600	0.60	0.38	300
EPICF160808 ☐ 47N ☐	47.0	12	17	28	34	35	34	900	1600	0.70	0.45	300
EPICF160808 ☐ 56N ☐	56.0	12	17	28	34	34	31	900	1400	0.75	0.50	300
EPICF160808 ☐ 68N ☐	68.0	12	18	29	34	30	22	700	1200	0.85	0.55	300
EPICF160808 ☐ 82N ☐	82.0	12	18	28	33	27	--	600	1100	0.95	0.60	300
EPICF160808 ☐ R10 ☐	100.0	12	18	27	28	16	--	600	1000	1.00	0.65	300
EPICF201209 ☐ 1N5S	1.5	10	21	39	57	61	68	4000	>6000	0.10	0.02	300
EPICF201209 ☐ 1N8S	1.8	10	18	35	49	55	59	4000	>6000	0.10	0.02	300
EPICF201209 ☐ 2N2S	2.2	10	18	33	46	53	58	4000	>6000	0.10	0.03	300
EPICF201209 ☐ 2N7S	2.7	12	19	36	50	56	60	4000	>6000	0.10	0.03	300
EPICF201209 ☐ 3N3 ☐	3.3	12	16	29	40	47	51	4000	>6000	0.13	0.04	300
EPICF201209 ☐ 3N9 ☐	3.9	12	18	33	46	54	60	4000	>6000	0.15	0.05	300
EPICF201209 ☐ 4N7 ☐	4.7	12	18	34	46	55	60	3500	>6000	0.20	0.05	300
EPICF201209 ☐ 5N6 ☐	5.6	15	20	38	51	60	66	3200	5400	0.23	0.05	300
EPICF201209 ☐ 6N8 ☐	6.8	15	20	39	52	63	69	2800	4200	0.25	0.06	300
EPICF201209 ☐ 8N2 ☐	8.2	15	21	40	54	63	70	2400	3700	0.28	0.07	300
EPICF201209 ☐ 10N ☐	10.0	15	20	38	51	60	67	2100	3100	0.30	0.09	300
EPICF201209 ☐ 12N ☐	12.0	15	21	39	52	60	67	1900	3000	0.35	0.10	300
EPICF201209 ☐ 15N ☐	15.0	15	22	42	55	63	72	1600	2600	0.40	0.11	300
EPICF201209 ☐ 18N ☐	18.0	15	24	42	57	63	72	1500	2300	0.45	0.13	300
EPICF201209 ☐ 22N ☐	22.0	18	23	43	55	60	69	1400	2100	0.50	0.15	300
EPICF201209 ☐ 27N ☐	27.0	18	23	42	53	58	68	1300	1800	0.55	0.17	300
EPICF201209 ☐ 33N ☐	33.0	18	24	43	54	55	60	1200	1700	0.60	0.19	300
EPICF201209 ☐ 39N ☐	39.0	18	23	41	50	47	47	1000	1400	0.65	0.25	300
EPICF201209 ☐ 47N ☐	47.0	18	23	41	49	43	41	900	1200	0.70	0.26	300
EPICF201209 ☐ 56N ☐	56.0	18	23	42	48	39	38	800	1100	0.75	0.28	300
EPICF201209 ☐ 68N ☐	68.0	18	25	42	45	30	--	700	900	0.80	0.33	300
EPICF201209 ☐ 82N ☐	82.0	18	24	41	41	--	--	600	800	0.90	0.37	300

Inductance Tolerance (S : ± 0.3 nH, D : ±0.5 nH, J : ± 5%, K : ± 10%, M : ± 20%)

High Frequency Chip Inductors
EPICF Type

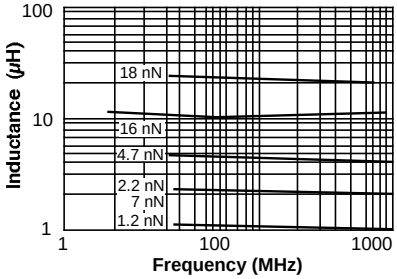
RoHS

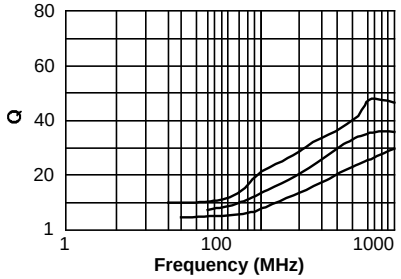
Electrical Characteristics

Part Number	Inductance (nH) @ 100 MHz	Q (Min.)	Q Typical (MHz) 100	300	500	800	1000	SRF (MHz) Min.	Typ.	DC Resistance (Ω Max.) Max.	Typ.	Rated Current (mA Max.)
EPICF201209 ☐ R10 ☐	100.0	18	23	37	37	--	--	600	800	0.90	0.40	300
EPICF201212 ☐ R12 ☐	120.0	13	22	33	29	--	--	500	700	0.95	0.43	300
EPICF201212 ☐ R15 ☐	150.0	13	22	34	26	--	--	500	700	1.00	0.46	300
EPICF201212 ☐ R18 ☐	180.0	13	23	34	20	--	--	400	600	1.10	0.50	300
EPICF201212 ☐ R22 ☐	220.0	12	20	23	--	--	--	350	550	1.20	0.75	300
EPICF201212 ☐ R27 ☐	270.0	12	20	19	--	--	--	300	480	1.30	0.85	300
EPICF201212 ☐ R33 ☐	330.0	12	22	15	--	--	--	250	400	1.40	0.90	300
EPICF201212 ☐ R39 ☐	390.0	10	17	12	--	--	--	250	400	1.30	0.85	300
EPICF201212 ☐ R47 ☐	470.0	10	17	--	--	--	--	200	350	1.50	0.95	300

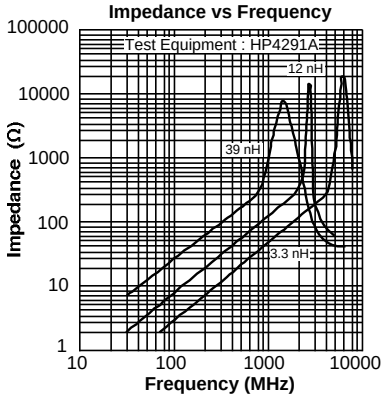
Inductance Tolerance (S : ± 0.3 nH, D : ±0.5 nH, J : ± 5%, K : ± 10%, M : ± 20%)

EPICF 1005 Type



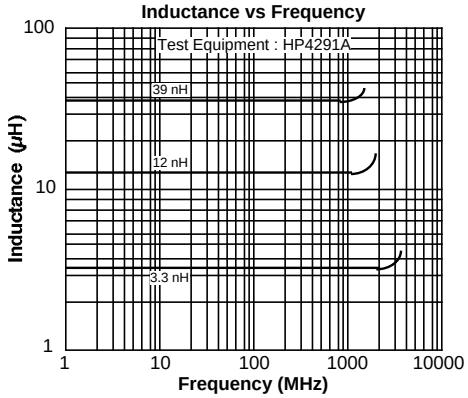


Impedance vs Frequency

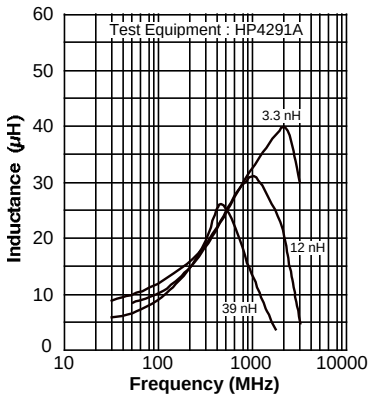


EPICF 1608 Type

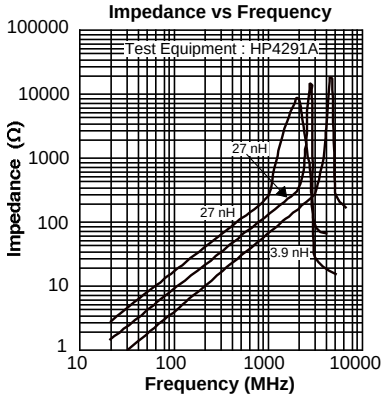
Inductance vs Frequency



Q vs Frequency

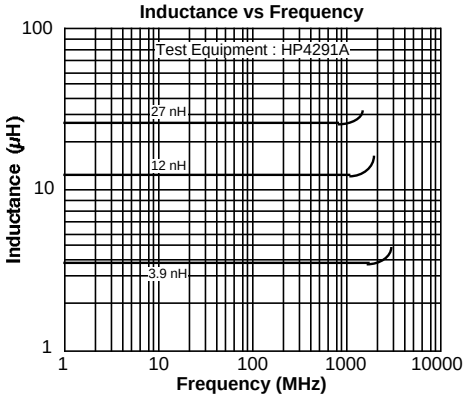


Impedance vs Frequency



EPICF 2012 Type

Inductance vs Frequency



Q vs Frequency