Mulitilayer Chip Inductors-JF Series

JF series For High frequency Applications

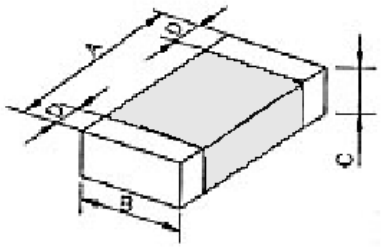
Features

1.Excellent Q factor and SRF characteristics.
2.Cost Effective
3.Small size of 1005/1608 is suitable for small portable equipment.
4.Supports operating frequency up to 6GHz with
nominal indutance values from 1.0nH to 470nH.

Applications

RF Resonance and Impedance Matching Circuit
RF and wireless communication
Information technology equipments, computers, telecommunications,
radar detectors, automotive electronics, cellular phones,
pagers, PDAs, keyless remote systems.

Dimensions (mm)



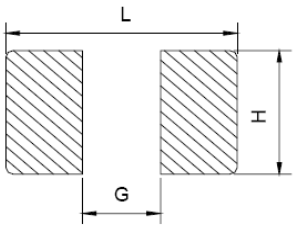
Product Identification

JF 160808- 1N2 S - PF

JF: SERIES NAME
160808:DIMENSION SIZE CODE
1R2: INDUCTANCE CODE.
S: TOLERANCE, S=±0.3nH J=5% K=10%
PF: Pb Free

SERIES	A	B	C	D
JF100505	1.0±0.1	0.5±0.1	0.5±0.1	0.25±0.2
JF160808	1.6±0.2	0.8±0.2	0.8±0.2	0.3±0.2
JF201209	2.0±0.2	1.25±0.2	0.9±0.2	0.5±0.3

RECOMMENDER P.C.B LAYOUT



SERIES	L	G	H
JF100505	1.2-2.4	0.4	0.4
JF160808	2.4-3.4	0.8	0.6
JF201209	3.0-4.0	1.2	1.0

Multilayer Ferrite Chip Inductors-JF Series

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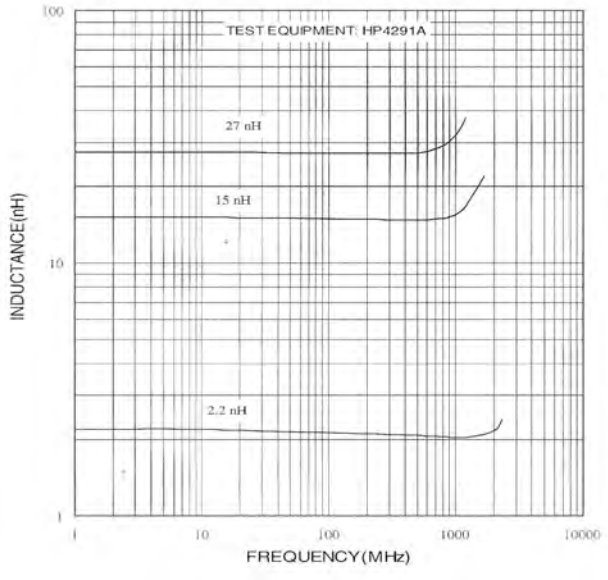
Electrical Characteristics

Part Number	Inductance (nH) at100MHz	Tolerance	Q min AT 100MHz	Q Typical AT 100MHz	Q Typical AT 800MHz	Self Resonsnt Frequency (MHz) Typical	DC Resistance (Ω) Max	IDC (mA)Max
JF100505-1N0□-PF	1.0	S	8	9	28	10000	0.12	300
JF100505-1N2□-PF	1.2	S	8	9	28	10000	0.12	300
JF100505-1N5□-PF	1.5	S	8	10	28	9000	0.13	300
JF100505-1N8□-PF	1.8	S	8	10	28	8700	0.14	300
JF100505-2N2□-PF	2.2	S	8	10	29	8100	0.16	300
JF100505-2N7□-PF	2.7	S	8	11	30	7700	0.17	300
JF100505-3N3□-PF	3.3	S/K	8	11	30	6300	0.19	300
JF100505-3N9□-PF	3.9	S/K	8	11	31	6100	0.22	300
JF100505-4N7□-PF	4.7	S/K	8	11	31	5400	0.24	300
JF100505-5N6□-PF	5.6	S/K	8	11	31	5100	0.27	300
JF100505-6N8□-PF	6.8	J/K	8	11	33	4550	0.32	250
JF100505-8N2□-PF	8.2	J/K	8	12	32	4100	0.40	250
JF100505-10N□-PF	10	J/K	8	12	32	3900	0.45	250
JF100505-12N□-PF	12	J/K	8	12	31	3000	0.50	250
JF100505-15N□-PF	15	J/K	8	12	30	2600	0.60	250
JF100505-18N□-PF	18	J/K	8	12	29	2350	0.65	200
JF100505-22N□-PF	22	J/K	8	12	28	2000	0.80	200
JF100505-27N□-PF	27	J/K	8	12	27	1900	0.90	200
JF100505-33N□-PF	33	J/K	8	10	25	1700	1.00	200
JF100505-39N□-PF	39	J/K	8	10	25	1600	1.20	150
JF100505-47N□-PF	47	J/K	8	9	22	1300	1.30	150
JF100505-56N□-PF	56	J/K	8	10	21	1250	2.00	150
JF100505-68N□-PF	68	J/K	8	10	15	1000	2.20	100
JF100505-82N□-PF	82	J/K	8	9	13	900	2.50	100
JF100505-R10□-PF	100	J/K	8	9	10	850	2.50	100

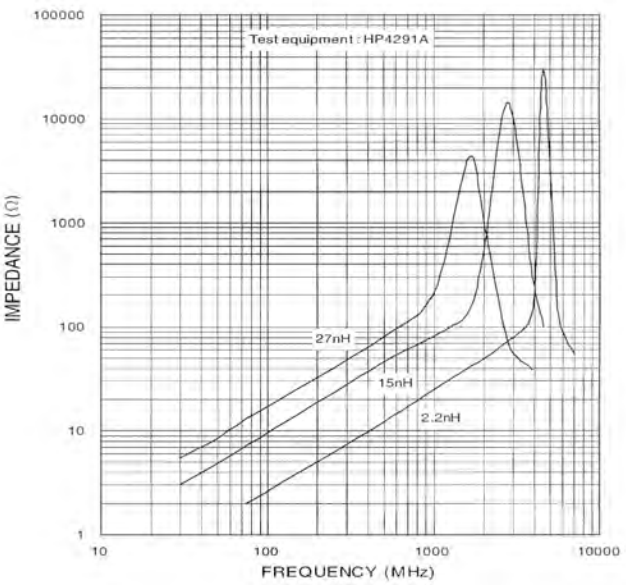
Multilayer Ferrite Chip Inductors-JF Series

JF series For High frequency Applications

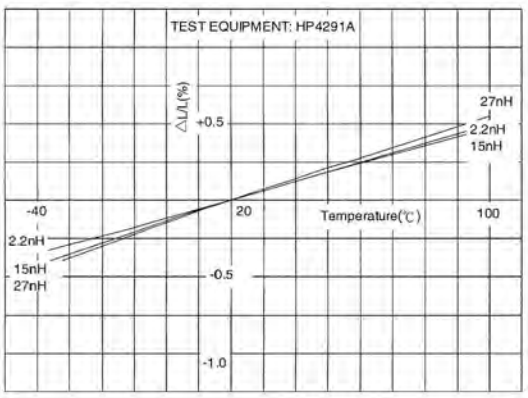
NDUCTANCE VS. FREQUENCY CHARACTERISTICS



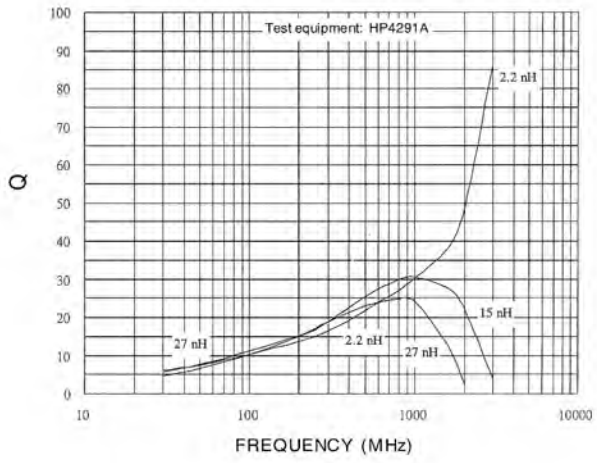
IMPEDANCE VS. FREQUENCY CHARACTERISTICS



INDUCTANCE VS.TEMPERATURE CHARACTERISTICS



Q VS. FREQUENCY CHARACTERISTICS



Multilayer Ferrite Chip Inductors-JF Series

JF series For High frequency Applications

Electrical Characteristics

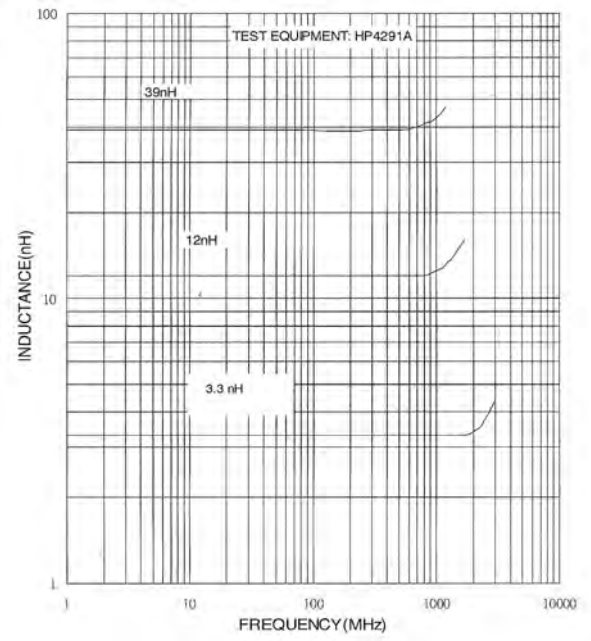
Part Number	Inductance (nH) at100MHz	Tolerance	Q min AT 50MHz	Q min AT 100MHz	Q Typical AT 500 MHz	Q Typical AT 100 MHz	Q Typical AT 300 MHz	Q Typical AT 500 MHz	Q Typical AT 800 MHz	Self Resonsnt Frequency (MHZ) Typical	DC Resistance (Ω) Max	IDC (mA)Max
JF160808-1N0□-PF	1.0	S		8		12			60	10000	0.10	500
JF160808-1N2□-PF	1.2	S		8		13			60	10000	0.10	500
JF160808-1N5□-PF	1.5	S		8		13			57	8000	0.10	50
JF160808-1N8□-PF	1.8	S		8		13			51	8000	0.10	500
JF160808-2N2□-PF	2.2	S		8		13			46	7200	0.10	500
JF160808-2N7□-PF	2.7	S		10		13			46	6200	0.10	500
JF160808-3N3□-PF	3.3	S/K		10		13			47	5200	0.12	500
JF160808-3N9□-PF	3.9	S/K		10		13			47	5000	0.14	500
JF160808-4N7□-PF	4.7	S/K		10		13			41	4750	0.16	500
JF160808-5N6□-PF	5.6	S/K		10		13			41	4100	0.18	500
JF160808-6N8□-PF	6.8	J/K		10		13			44	3750	0.22	500
JF160808-8N2□-PF	8.2	J/K		10		13			44	3300	0.24	500
JF160808-10N□-PF	10	J/K		12		13			45	3000	0.26	300
JF160808-12N□-PF	12	J/K		12		15			46	2600	0.28	300
JF160808-15N□-PF	15	J/K		12		15			48	2500	0.32	300
JF160808-18N□-PF	18	J/K		12		15			48	2400	0.35	300
JF160808-22N□-PF	22	J/K		12		17			45	2000	0.40	300
JF160808-27N□-PF	27	J/K		12		17			43	1900	0.45	300
JF160808-33N□-PF	33	J/K		12		18			39	1600	0.55	300
JF160808-39N□-PF	39	J/K		12		18			37	1400	0.60	300
JF160808-47N□-PF	47	J/K		12		18			35	1300	0.70	300
JF160808-56N□-PF	56	J/K		12		18			32	1100	0.75	300
JF160808-62N□-PF	62	J/K		12		18			34	1050	0.85	300
JF160808-68N□-PF	68	J/K		12		18			34	1050	0.85	300
JF160808-82N□-PF	82	J/K		12		18			32	900	1.00	300
JF160808-R10□-PF	100	J/K		12		18			10	770	1.20	300
JF160808-R12□-PF	*120	J/K	8		14		20			850	2.30	250
JF160808-R15□-PF	*150	J/K	8		15		16			550	2.40	250
JF160808-R18□-PF	*180	J/K	8		15		16			520	2.70	250

*at 50MHz

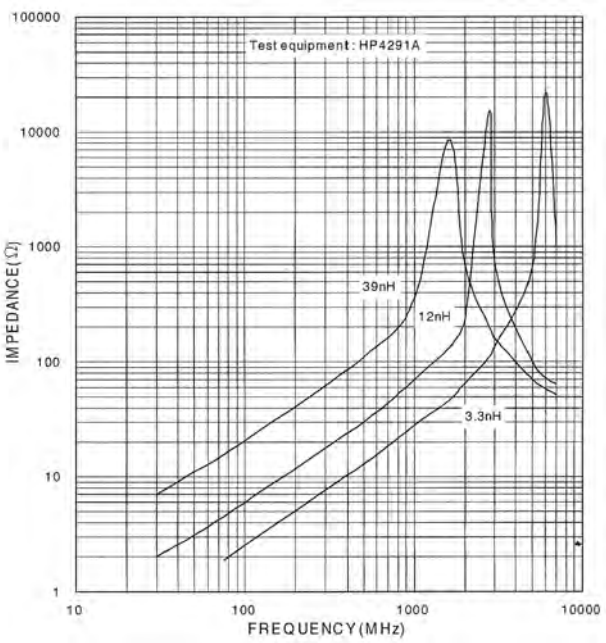
Multilayer Ferrite Chip Inductors-JF Series

JF series For High frequency Applications

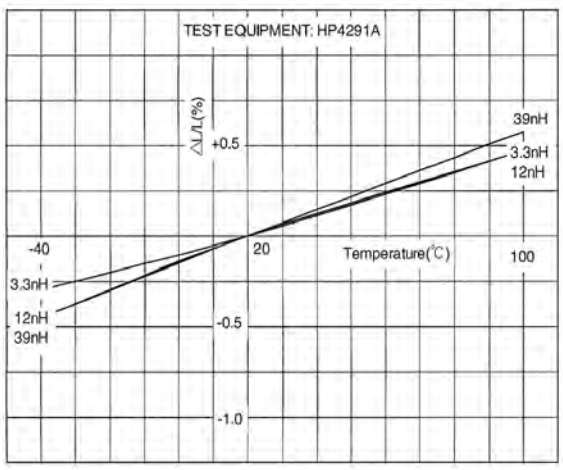
NDUCTANCE VS. FREQUENCY CHARACTERISTICS



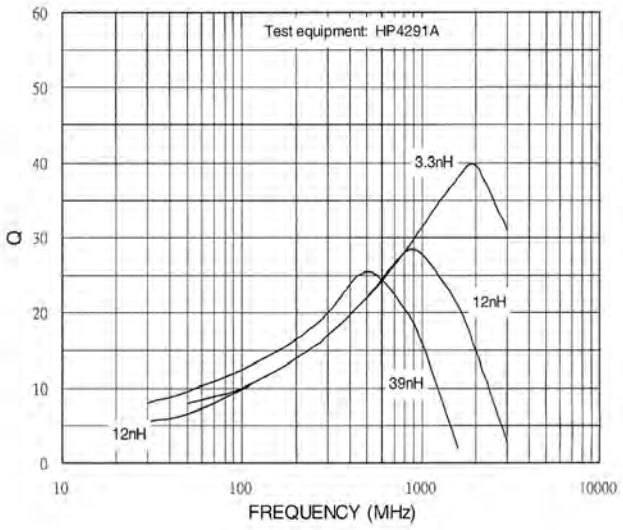
IMPEDANCE VS. FREQUENCY CHARACTERISTICS



INDUCTANCE VS.TEMPERATURE CHARACTERISTICS



Q VS. FREQUENCY CHARACTERISTICS



Multilayer Ferrite Chip Inductors-J JFseries

JF series For High frequency Applications

Electrical Characteristics

Part Number	Inductance (nH) at100MHz	Tolerance	Q min AT 50MHz	Q min AT 100MHz	Q Typical AT 500 MHz	Q Typical AT 100 MHz	Q Typical AT 300 MHz	Q Typical AT 500 MHz	Q Typical AT 800 MHz	Self Resonsnt Frequency (MHz) Typical	DC Resistance (Ω) Max	IDC (mA)Max
JF201209-1N0□-PF	1.0	S		10		13		40		>6000	0.10	300
JF201209-1N2□-PF	1.2	S		10		13		40		>6000	0.10	300
JF201209-1N5□-PF	1.5	S		10		13		40		>6000	0.10	300
JF201209-1N8□-PF	1.8	S		10		13		45		>6000	0.10	300
JF201209-2N2□-PF	2.2	S		10		13		48		>6000	0.10	300
JF201209-2N7□-PF	2.7	S		12		13		48		>6000	0.10	300
JF201209-3N3□-PF	3.3	S/K		12		15		56		>6000	0.13	300
JF201209-3N9□-PF	3.9	S/K		12		15		54		5400	0.15	300
JF201209-4N7□-PF	4.7	S/K		12		15		50		4500	0.20	300
JF201209-5N6□-PF	5.6	S/K		12		15		53		4000	0.23	300
JF201209-6N8□-PF	6.8	J/K		15		15		51		3650	0.25	300
JF201209-8N2□-PF	8.2	J/K		15		15		53		3000	0.28	300
JF201209-10N□-PF	10	J/K		15		16		45		2500	0.30	300
JF201209-12N□-PF	12	J/K		15		16		48		2450	0.35	300
JF201209-15N□-PF	15	J/K		15		17		48		2000	0.40	300
JF201209-18N□-PF	18	J/K		15		17		43		1750	0.45	300
JF201209-22N□-PF	22	J/K		15		17		40		1700	0.50	300
JF201209-27N□-PF	27	J/K		15		18		38		1550	0.55	300
JF201209-33N□-PF	33	J/K		15		19		35		1350	0.60	300
JF201209-39N□-PF	39	J/K		18		21		37		1300	0.65	300
JF201209-47N□-PF	47	J/K		18		21		38		1200	0.70	300
JF201209-56N□-PF	56	J/K		18		21		31		1150	0.75	300
JF201209-68N□-PF	68	J/K		18		21		28		1000	0.80	300
JF201209-82N□-PF	82	J/K		18		22		16		850	0.90	300
JF201209-R10□-PF	100	J/K		18		23				730	1.00	300
JF201209-R12□-PF	*120	J/K	13		16	22				650	1.20	300
JF201209-R15□-PF	*150	J/K	13		16	22				550	1.40	300
JF201209-R18□-PF	*180	J/K	13		16	23				500	1.80	300
JF201209-R22□-PF	*220	J/K	12		14	20				450	2.00	300
JF201209-R27□-PF	*270	J/K	12		14	20				400	2.50	200
JF201209-R33□-PF	*330	J/K	12		14	22				380	3.00	200

Multilayer Ferrite Chip Inductors-JF Series

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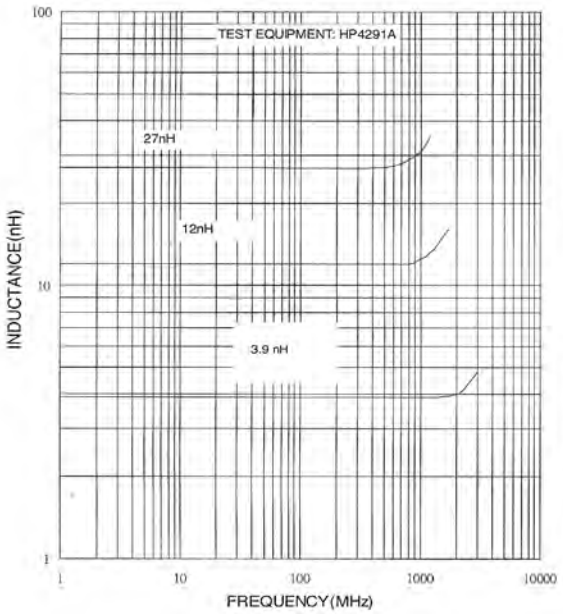
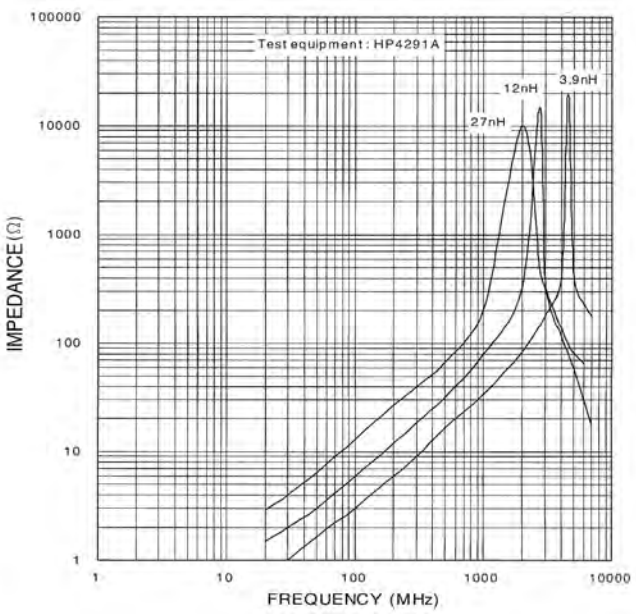
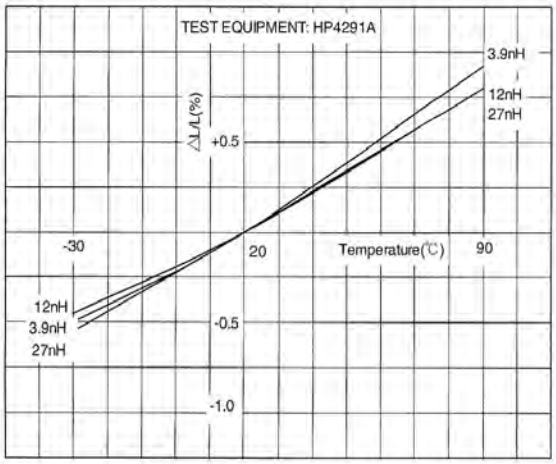
NDUCTANCE VS. FREQUENCY CHARACTERISTICS



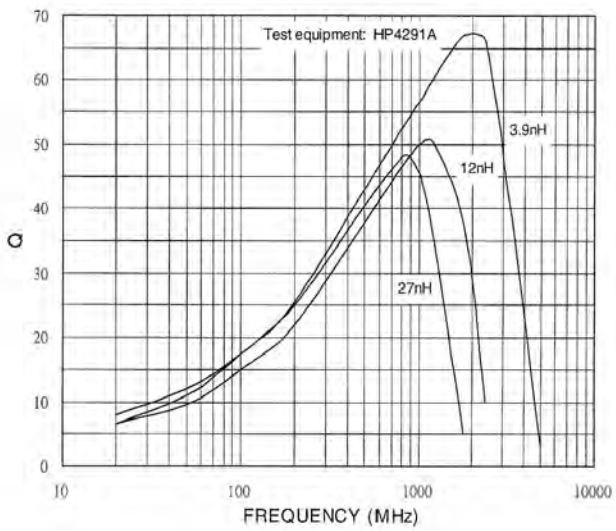
IMPEDANCE VS. FREQUENCY CHARACTERISTICS



INDUCTANCE VS.TEMPERATURE CHARACTERISTICS



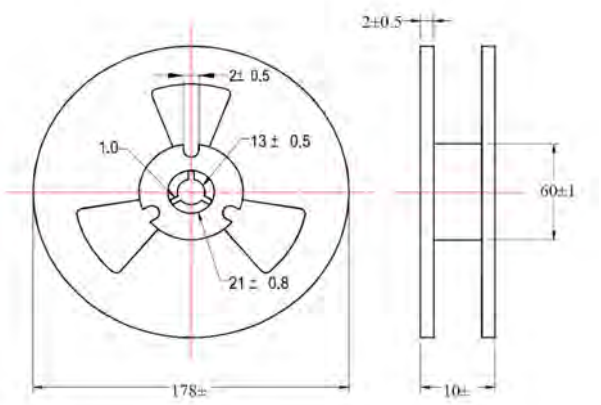
Q VS. FREQUENCY CHARACTERISTICS



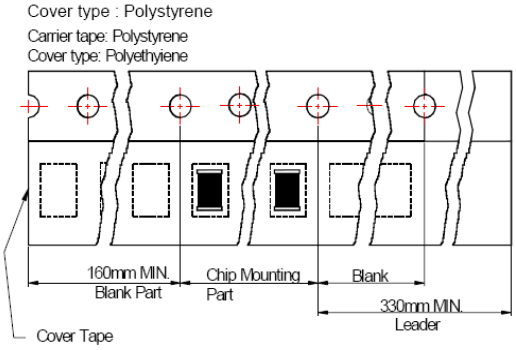
Multilayer Ferrite Chip Inductors-JF Series

PACKAGING

REEL Dimensions (mm)



TAPE Material



Carrier Tape: Polystyrene (for 201209, 201212, 321611 series)
Paper (for 160808)

Tape Dimensions (mm)

Figure A

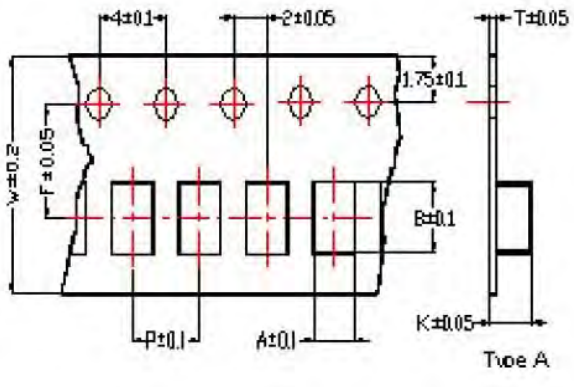
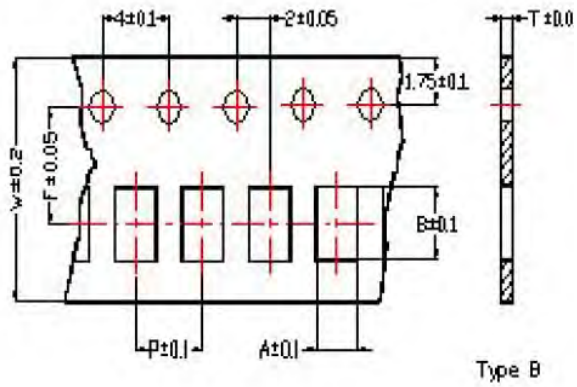


Figure B



TAPE DIMENSIONS AND PACKAGING QUANTITIES

TYPE	A	B	W	P	T	CHIPS / REEL
100505	0.65	1.15	8	2	0.6	10000
160808	1.01	1.8	8	4	0.95	4000
201209	1.42	2.24	8	4	0.22	4000