SMD Ceramic High Q RF Chip Inductors

BSPQ Series

BSPQ Series supports miniaturized devices. Its low inductance, high precision and higher Q enables easy impedance matching at both RF and IF circuits and compact high frequency circuit designing.

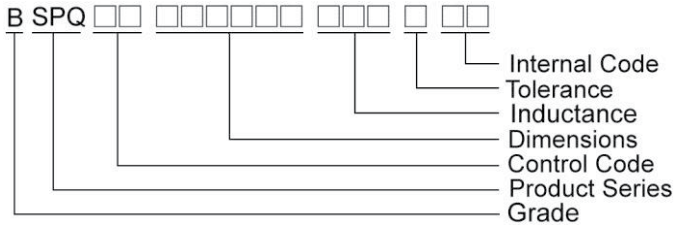
Features

- Film Type
- Excellent high frequency application
- Higher Q factor
- Miniaturization
- Tight tolerance

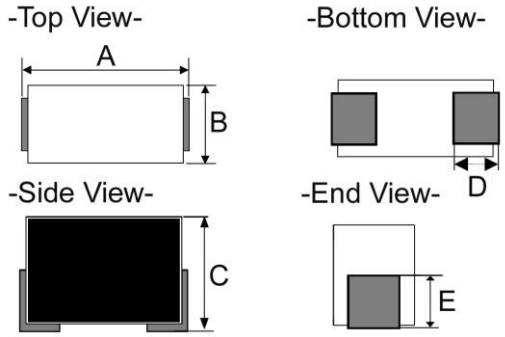
Applications

- RF matching circuit requiring Q value
- Bluetooth, WLAN, UWB, digital TV tuners and high-frequency circuit and module

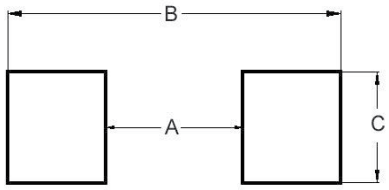
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	A	B	C	D	E
BSPQ00060304	0.6±0.03	0.3±0.03	0.4±0.03	0.15±0.03	0.2±0.03

Dimensions in mm

TYPE	A	B	C
BSPQ00060304	0.3	0.75 ~ 1.05	0.3

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated Current (mA) Max
BSPQ000603040N6□00	0.6	±0.1nH/±0.2nH	20	500	20000	0.04	1100
BSPQ000603040N7□00	0.7	±0.1nH/±0.2nH	20	500	20000	0.04	1100
BSPQ000603040N8□00	0.8	±0.1nH/±0.2nH	20	500	18000	0.04	1100
BSPQ000603040N9□00	0.9	±0.1nH/±0.2nH	20	500	18000	0.04	1100
BSPQ000603041N0□00	1.0	±0.1nH/±0.2nH	20	500	16000	0.04	1100
BSPQ000603041N1□00	1.1	±0.1nH/±0.2nH	20	500	14000	0.04	1100
BSPQ000603041N2□00	1.2	±0.1nH/±0.2nH	20	500	13000	0.04	1100
BSPQ000603041N3v00	1.3	±0.1nH/±0.2nH	20	500	13000	0.04	1100
BSPQ000603041N4□00	1.4	±0.1nH/±0.2nH	20	500	12000	0.04	1100
BSPQ000603041N5□00	1.5	±0.1nH/±0.2nH	20	500	12000	0.05	1000
BSPQ000603041N6□00	1.6	±0.1nH/±0.2nH	20	500	10000	0.05	1000
BSPQ000603041N7□00	1.7	±0.1nH/±0.2nH	20	500	10000	0.07	800
BSPQ000603041N8□00	1.8	±0.1nH/±0.2nH	20	500	10000	0.08	800
BSPQ000603041N9□00	1.9	±0.1nH/±0.2nH	20	500	10000	0.12	600
BSPQ000603042N0□00	2.0	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N1□00	2.1	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N2□00	2.2	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N3□00	2.3	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N4□00	2.4	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N5□00	2.5	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N6□00	2.6	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N7□00	2.7	±0.1nH/±0.2nH	20	500	9000	0.12	600
BSPQ000603042N8□00	2.8	±0.1nH/±0.2nH	20	500	8000	0.12	600
BSPQ000603042N9□00	2.9	±0.1nH/±0.2nH	20	500	8000	0.12	600
BSPQ000603043N0□00	3.0	±0.1nH/±0.2nH	20	500	8000	0.12	600
BSPQ000603043N1□00	3.1	±0.1nH/±0.2nH	20	500	7500	0.17	500
BSPQ000603043N2□00	3.2	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N3□00	3.3	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N4□00	3.4	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N5□00	3.5	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N6□00	3.6	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N7□00	3.7	±0.1nH/±0.2nH	20	500	7000	0.17	500

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Q Min	Test Frequency (MHz)	SRF (MHz) Min	RDC (Ω) Max	Rated Current (mA) Max
BSPQ000603043N8□00	3.8	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603043N9□00	3.9	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603044N0□00	4.0	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603044N1□00	4.1	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603044N2□00	4.2	±0.1nH/±0.2nH	20	500	7000	0.17	500
BSPQ000603044N3□00	4.3	3/5	20	500	7000	0.17	500
BSPQ000603044N7□00	4.7	3/5	20	500	7000	0.25	400
BSPQ000603045N1□00	5.1	3/5	20	500	5500	0.25	400
BSPQ000603045N6□00	5.6	3/5	20	500	5500	0.25	400
BSPQ000603046N2□00	6.2	3/5	20	500	5500	0.25	400
BSPQ000603046N8□00	6.8	3/5	20	500	5500	0.30	400
BSPQ000603047N5□00	7.5	3/5	20	500	4500	0.30	400
BSPQ000603048N2□00	8.2	3/5	20	500	4500	0.40	300
BSPQ000603049N1□00	9.1	3/5	20	500	4500	0.40	300
BSPQ0006030410N□00	10	3/5	20	500	4500	0.40	300
BSPQ0006030412N□00	12	3/5	20	500	4000	0.50	300
BSPQ0006030415N□00	15	3/5	20	500	3500	0.70	300
BSPQ0006030418N□00	18	3/5	20	500	3500	0.80	250
BSPQ0006030422N□00	22	3/5	20	500	3000	0.82	250

Note: When ordering, please specify tolerance code. Tolerance : B=±0.1nH , C=±0.2nH , H=±3% , J=±5%

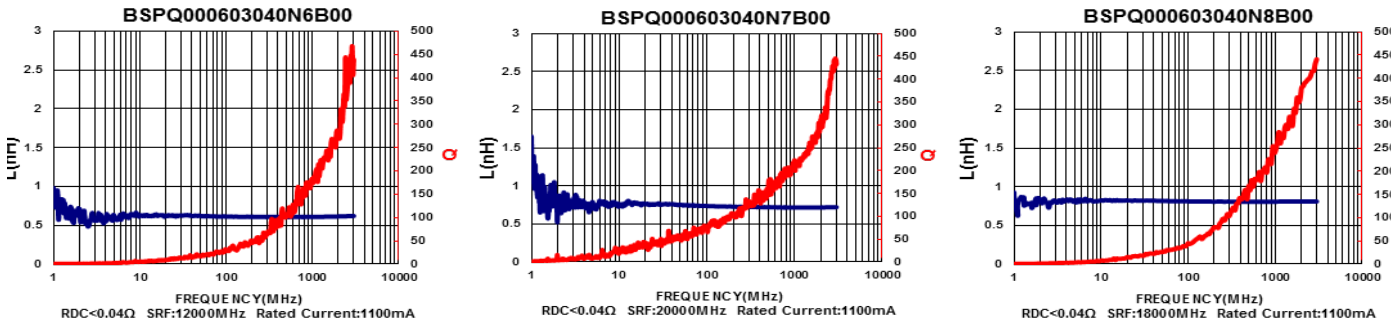
- Operating temperature range - 55℃ ~ 125℃(Including self - temperature rise)
- Rated Current：Applied the current to coils, the temperature rise shall not be more than 25℃
- Residual impedance of short chip : 0.48nH
- Measure Equipment：

  L & Q：Agilent E4991A+Agilent 16197A (or equivalent)

  SRF：Agilent E4991A or HP19196C

  RDC：HP4338B or CHEN HWA 502

Test Instruments： Agilent E4991A Material/Impedance Analyzer



Test Instruments：Agilent E4991A Material/Impedance Analyzer

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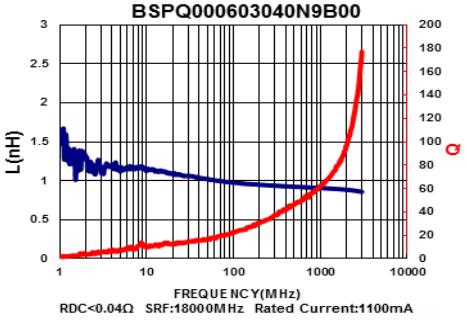

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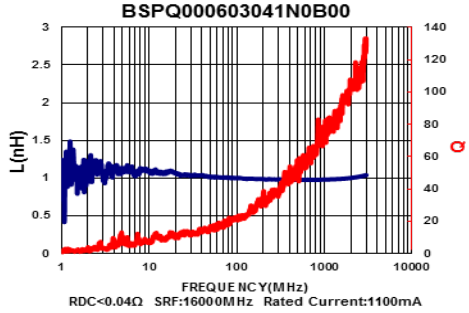

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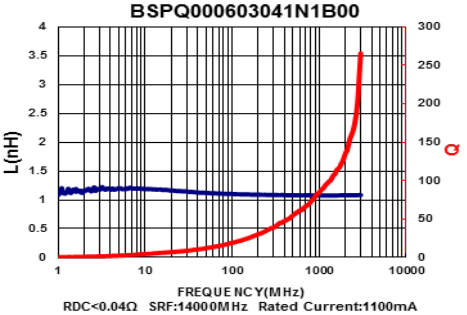

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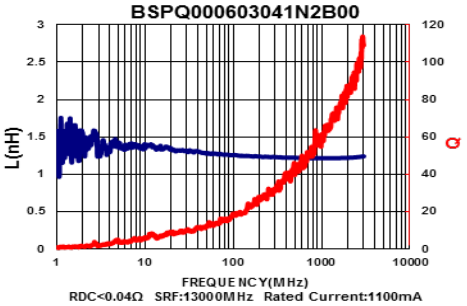

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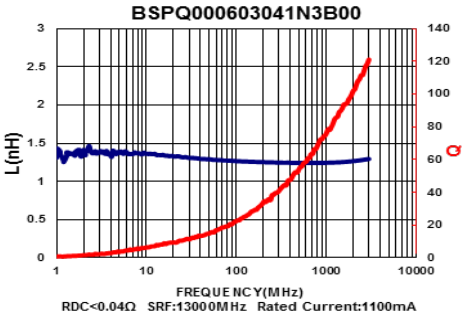

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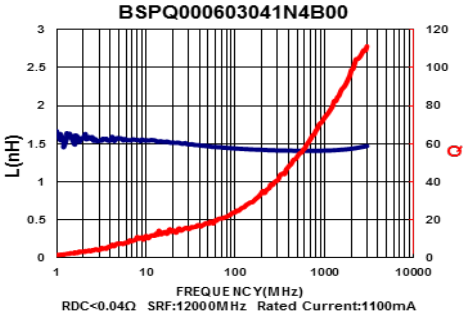

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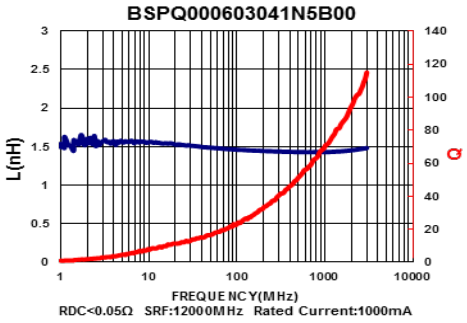

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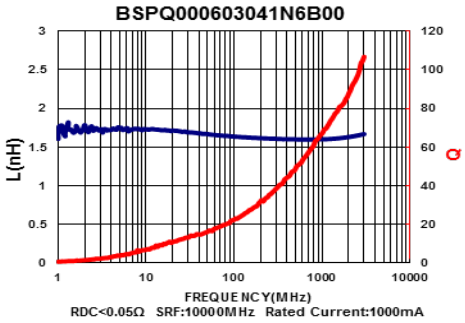

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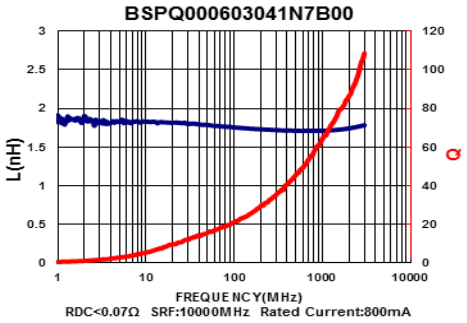

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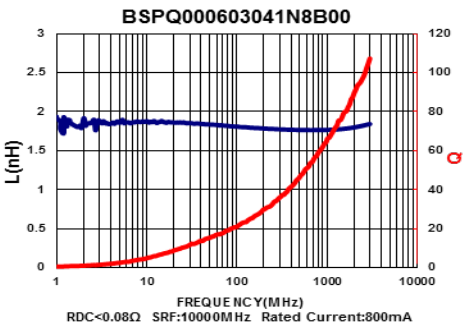

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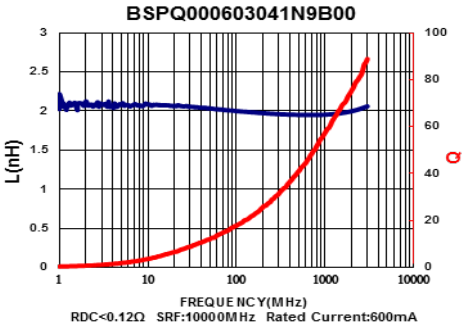

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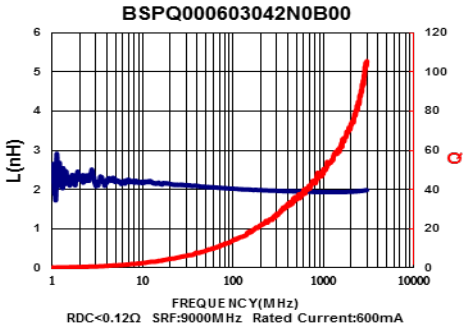

Test Instruments：Agilent E4991A Material/Impedance Analyzer

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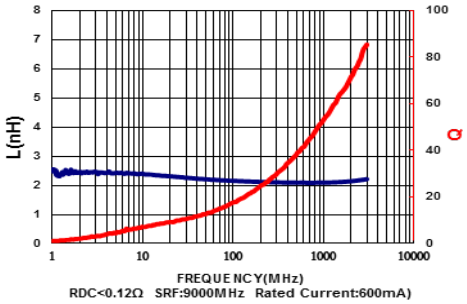

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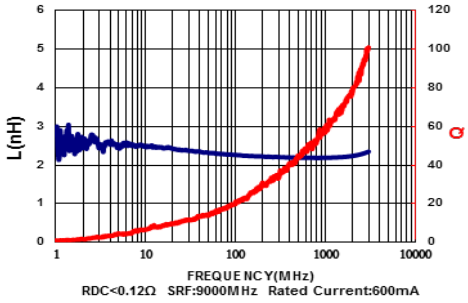

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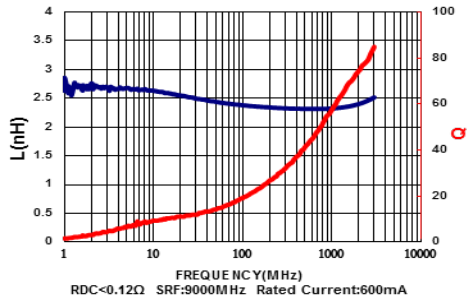

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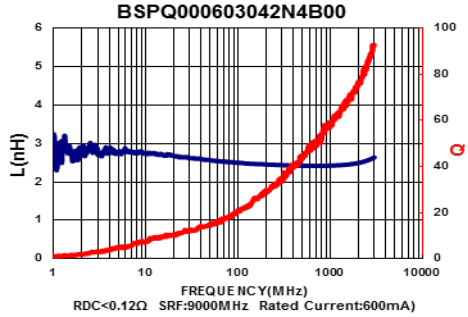

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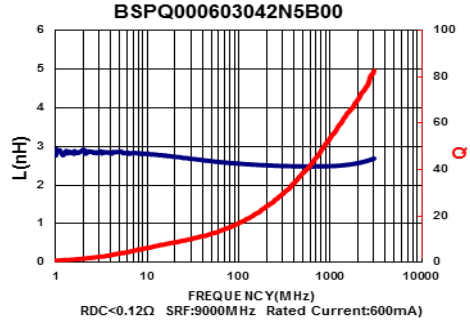

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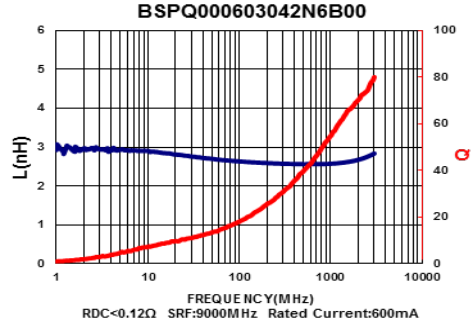

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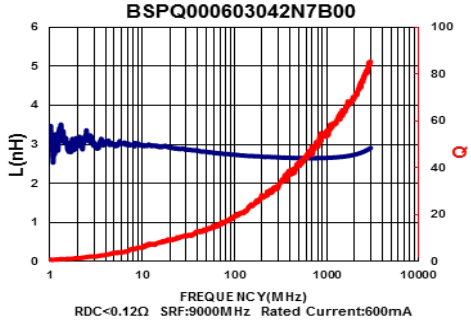

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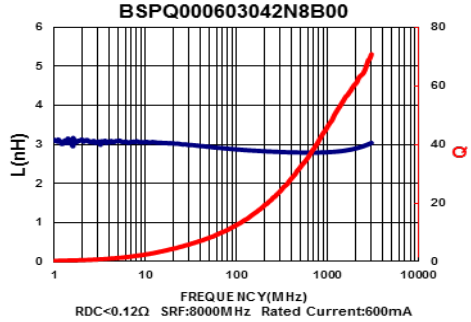

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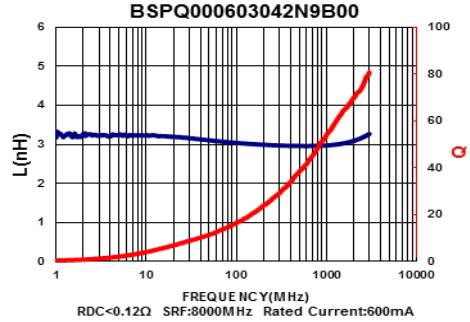

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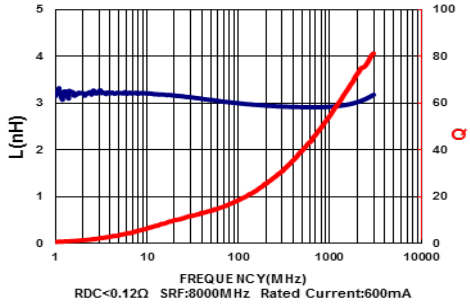

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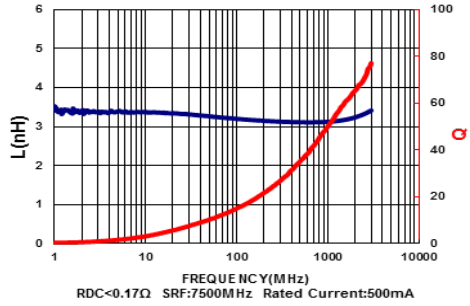

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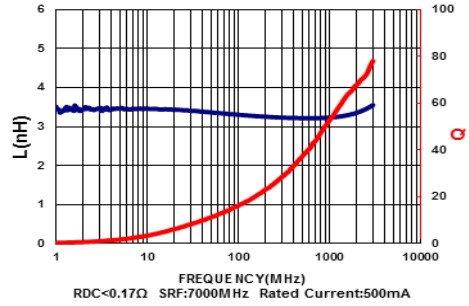

Test Instruments：Agilent E4991A Material/Impedance Analyzer

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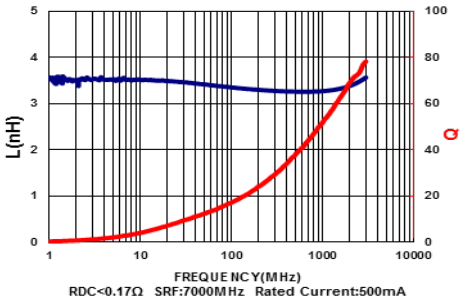

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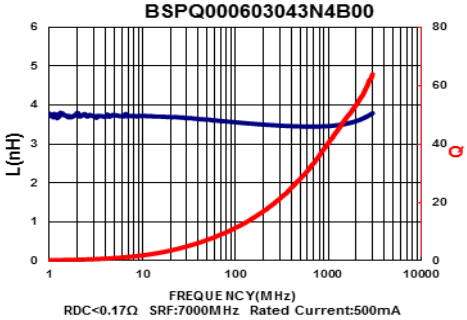

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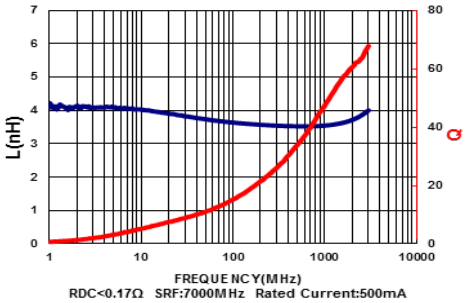

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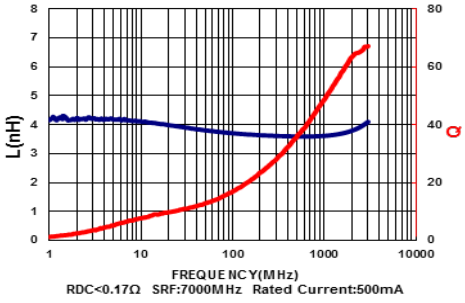

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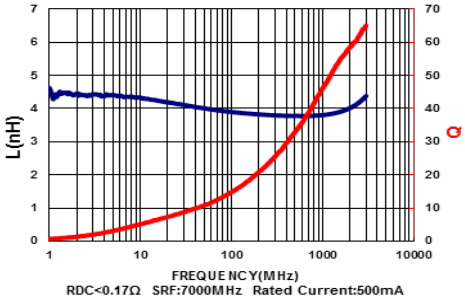

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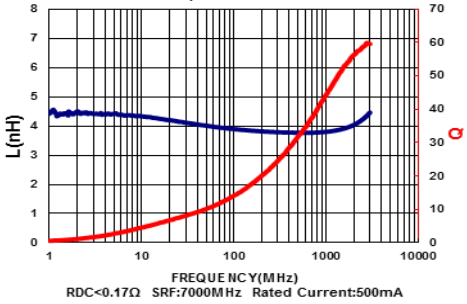

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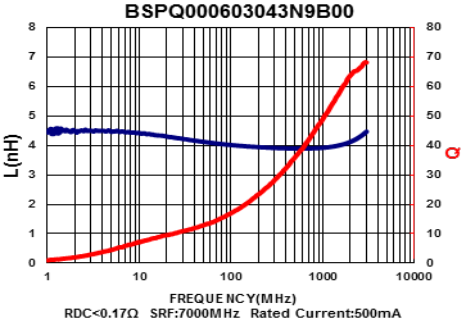

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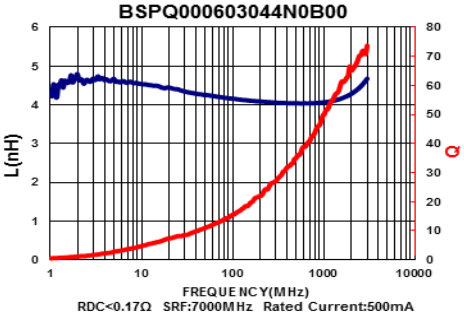

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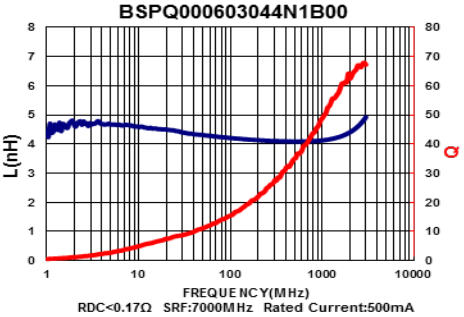

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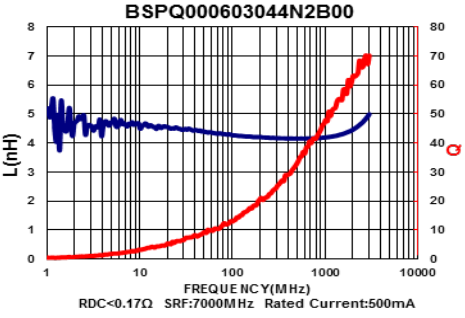

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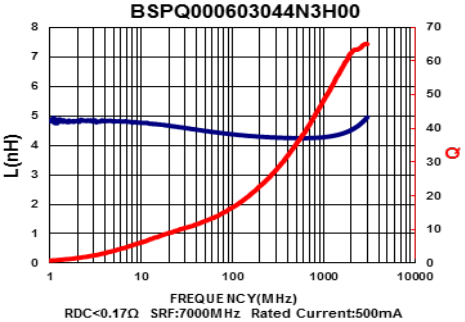

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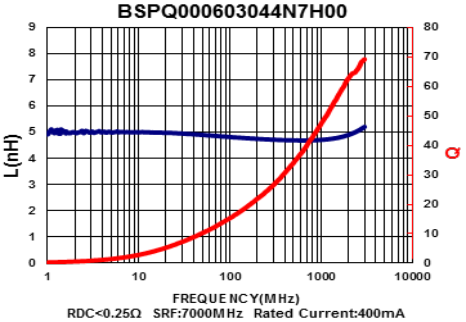

Test Instruments：Agilent E4991A Material/Impedance Analyzer

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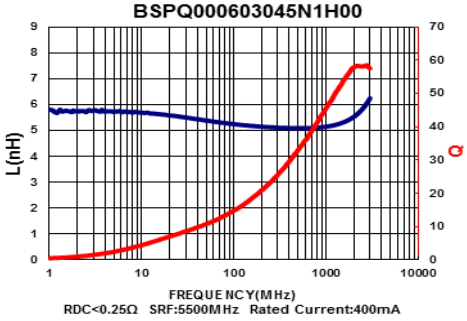

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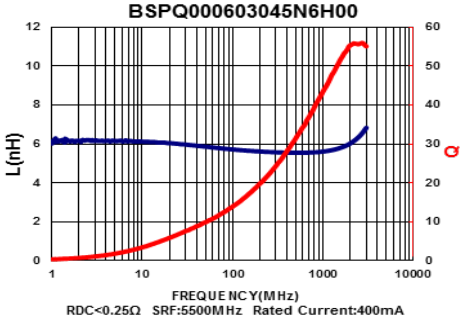

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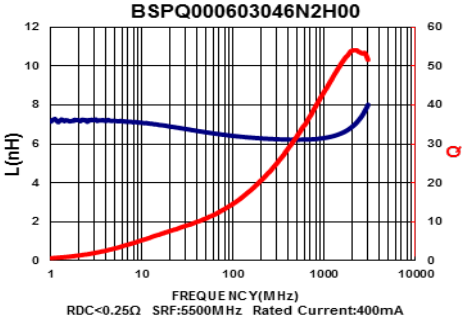

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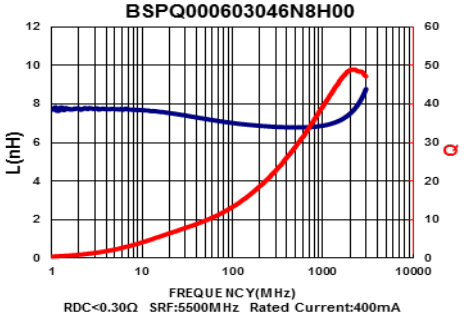

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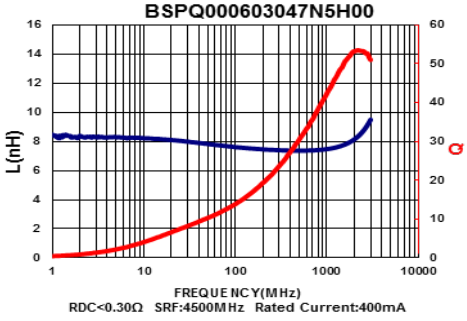

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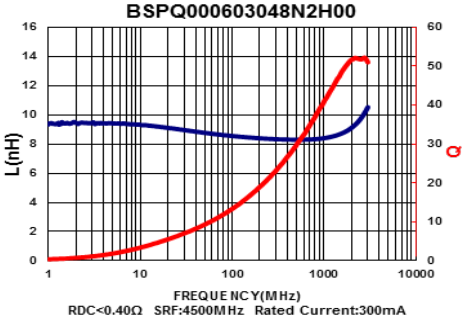

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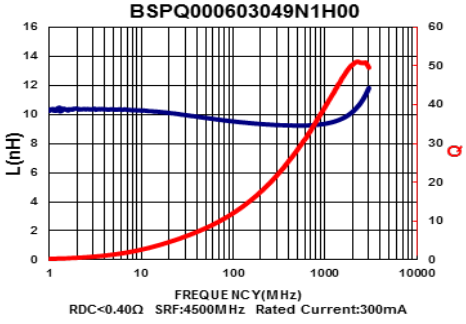

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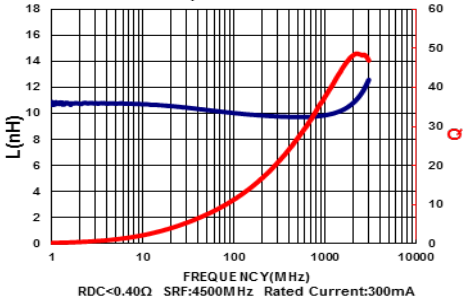

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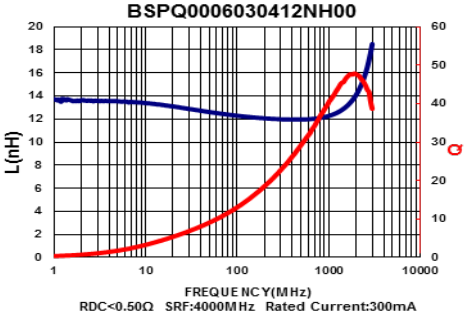

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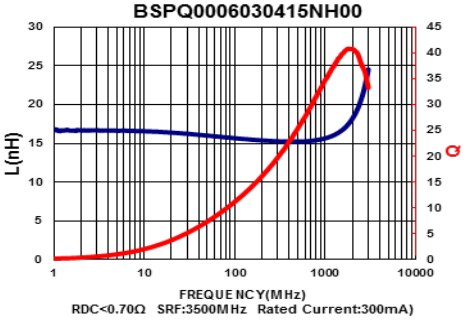

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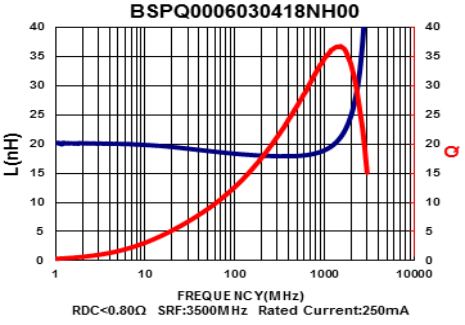

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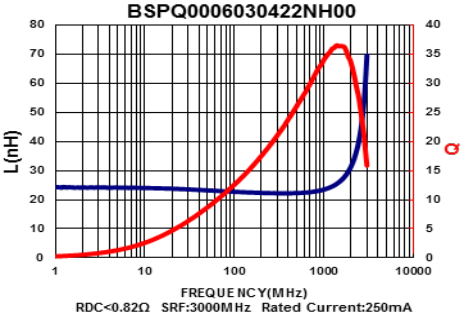
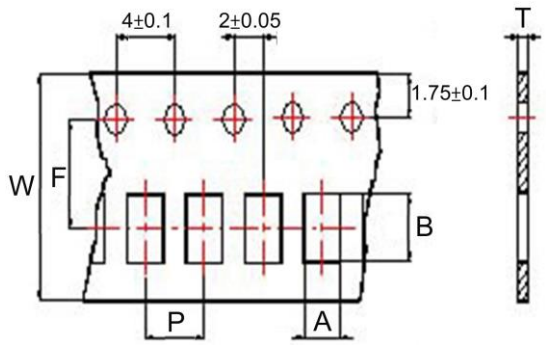
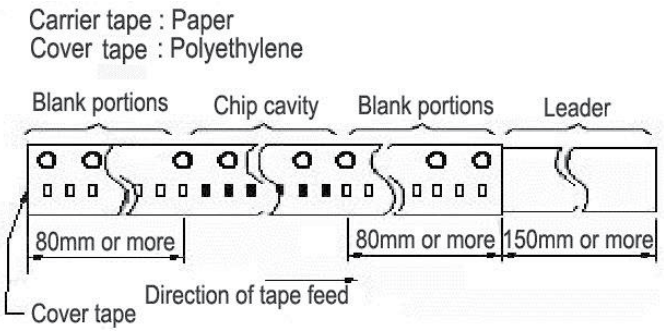


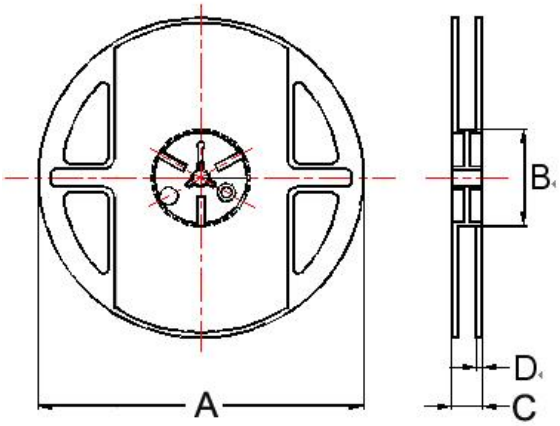
Packaging Specifications

Tape Dimensions



Tape Material





Dimensions in mm

TYPE	Tape Dimensions						Reel Dimensions				Quantity
	A	B	T	W	P	F	A	B	C	D	PCS / Reel
BSPQ00060304	0.37	0.68	0.45	8	2	3.5	180	60	13	1.5	15000

For More Information:
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