

INDEX

SMTLF Series.....	2
SMTLF3922P(9.5 x 6.0 x 4.9mm).....	3
SMTLF632(9.1 x 11.2 x 5.6mm).....	4
SMTLF251508Q(6.0 x 5.1 x 2.5mm).....	6
SMTLF953Q(13.0 x 14.5 x 11.0mm).....	8
SMTLF633Q(10 x 8.7 x 6.5mm).....	12
SMTLF643Q(10 x 8.7 x 6.6mm).....	12
SMTLF0416Q(9.2 x 6.0 x 5.0mm).....	15



SMTLF3922P SERIES

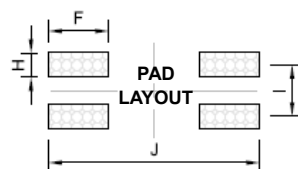
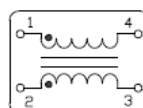
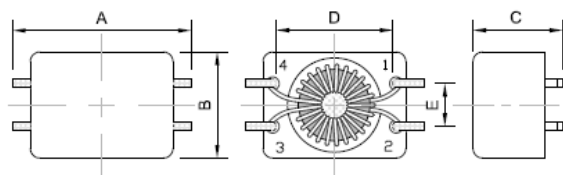
SIGNAL AND DC COMMON-MODE CHOKES COILS.

Applications :

- Signal line
- Digital communication equipment



Shape and Dimensions (Dimensions are in mm) :



Item	A Max	B Max	C Max	D
SMTLF3922P	9.5	6.0	4.9	5.5

Item	E	F	H	I	J
SMTLF3922P	2.5	3.0	1.2	2.5	10.5

Features :

- compact design
- High rated currents, reduced components height.
- Ideal inductors for DC-DC conversion.
- Available on tape and reel for auto surface mounting.

Characteristics :

- Rated Current: The current when temperature of coil Increase up to max. $\Delta T=40^{\circ}\text{C}$. ($T_a=20^{\circ}\text{C}$)
- Operating temperature : -25°C to 105°C .

Product identification :

SMT LF 3922P - 101 N

(1) (2) (3) (4) (5)

- (1)Type : **Surface Mountable Type** .
- (2) Series :Common mode Line Filter.
- (3) Dimensions :**3922P** is size.
- (4) Inductance: **101** for 100uH
- (5)Inductance tolerance : "**N**" : $\pm 30\%$

Test equipments :

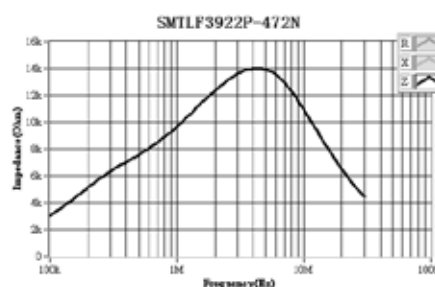
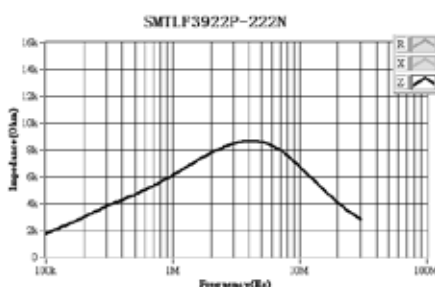
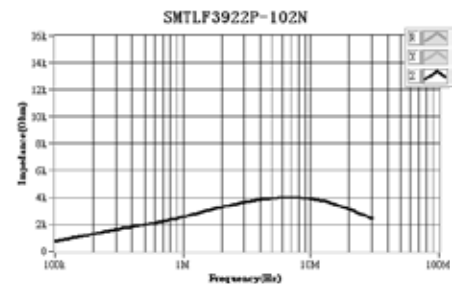
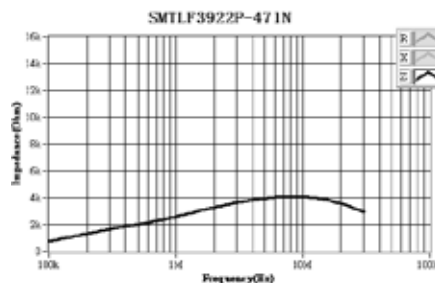
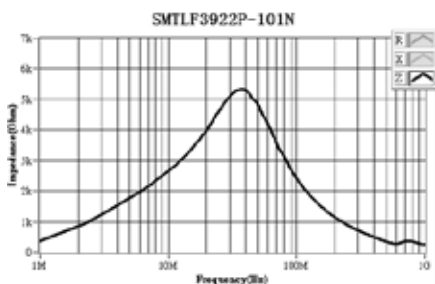
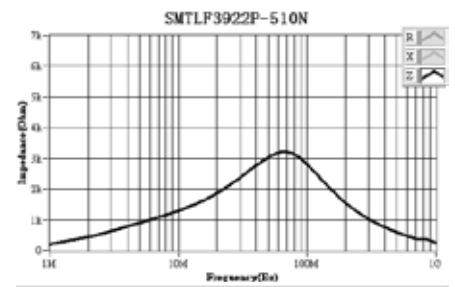
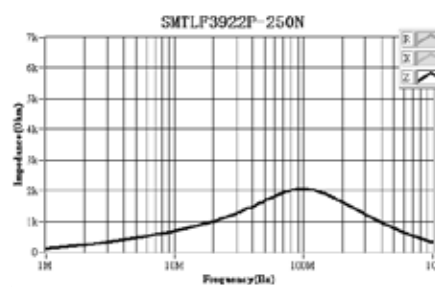
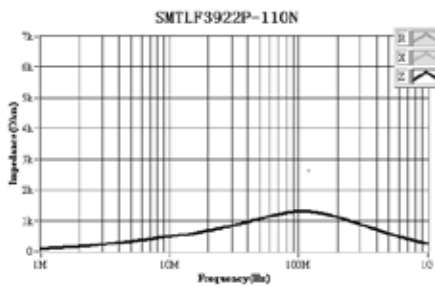
- L: Agilent E4980 Precision LCR Meter
- DCR: Milli-ohm meter
- Impedance: Agilent E4991A RF Impedance analyer with Agilent 16197A test fixture
- Electrical specifications at 25°C .



● SMTLF3922P series

Part No.	Inductance L (μ H)	Tolerance ($\pm\%$)	Leakage (nH) Typ	Test Freq. KHz	DCR (m Ω) Max.	Rated Current (mA) Max.
SMTLF3922P-110N	11	30	50	100	120	700
SMTLF3922P-250N	25	30	60	100	130	700
SMTLF3922P-510N	51	30	70	100	160	600
SMTLF3922P-101N	100	30	100	100	230	500
SMTLF3922P-471N	470	30	100	100	200	500
SMTLF3922P-102N	1000	+50/-30	70	100	280	500
SMTLF3922P-222N	2200	+50/-30	120	100	480	400
SMTLF3922P-472N	4700	+50/-30	200	100	700	200

Typical performance curves:



* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

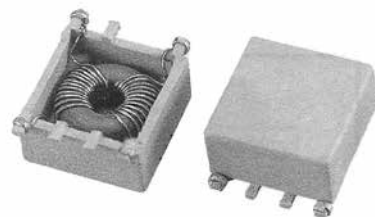


SMTLF632 SERIES

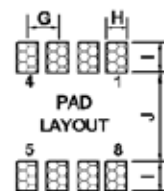
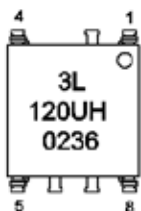
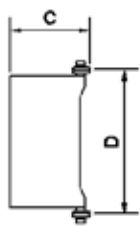
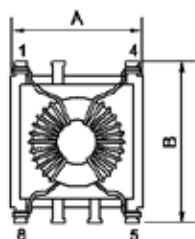
SMT COMMON MODE FILTER.

Applications :

- EMI filters.
- Personal computers.
- Communication equipment.



Shape and Dimensions (Dimensions are in mm) :



Item	A Max.	B Max.	C Max.	D
SMTLF632	9.1	11.2	5.6	10.0

Item	I	J	G	H
SMTLF632	2.54	7.6	2.54	1.8

Features :

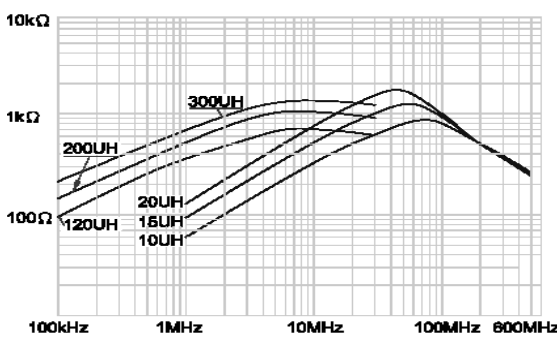
- Compact design.
- Single layer winding for minimum capacitance.
- Meets UL 94V-0 flammability standard.
- Available on tape and reel for auto surface mounting.
- In addition to the standard values shown, 3L can custom engineer parts for specific applications.
- Rated Current : The current when temperature of coil increase up to max. $\Delta T = 40^{\circ}\text{C}$. ($T_a = 20^{\circ}\text{C}$)

Product identification :

SMT LF 632 - 120UH

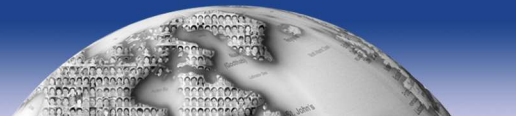
(1) (2) (3) (4)

- (1) Type : **S**urface **M**ountable Type.
- (2) Style : Common mode **L**ine **F**ilter.
- (3) Core size : **OD**=6.0mm, **ID**=3.0mm, **Ht**=2.0mm.
- (4) Inductance : **120uH**.
- Operating temp. : -25°C to 105°C

Part No.	L1=L2 (uH) ±30%	DCR (mΩ) Max.	Rated Current (A)	Impedance to Frequency curve
SMTLF632-10UH	10	25	2.5	 <p>Impedance tested by HP4285A or HP4291B.</p>
SMTLF632-15UH	15	40	2.0	
SMTLF632-20UH	20	70	1.5	
SMTLF632-120UH	120	25	2.5	
SMTLF632-200UH	200	40	2.0	
SMTLF632-300UH	300	70	1.5	

L tested by HP4284A Precision LCR meter @10kHz 10mV, DCR tested by Milli-ohm meter.

* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.



SMTLF251508Q SERIES

SMT COMMON MODE FILTER.

Applications :

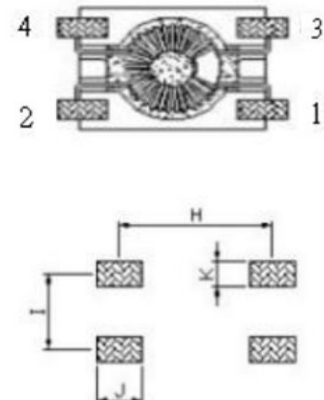
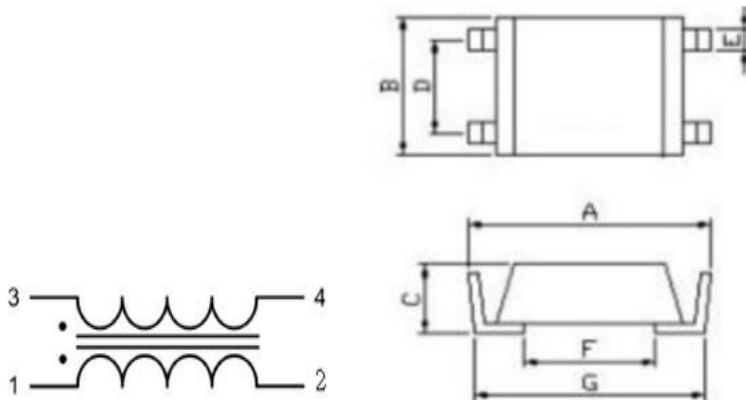
- . Data and signal line chokes
- Digital communication equipment
- Industrial electronics, etc

Features :

- . High rated currents, reduced components height
- Ideally used in xDSL, Modem and telecom applications
- Suitable for reflow soldering



Shape and Dimensions (Dimensions are in mm) :



Item	A Max	B	C	D	E	F
SMTLF251508Q	6.5	3.6+/-0.15	1.65+/-0.15	2.5+/-0.15	0.55+/-0.1	3.4+/-0.2
	G TYP	H TYP	I TYP	J TYP	K TYP	
	6.0	5.1	2.5	1.5	0.85	

Characteristics :

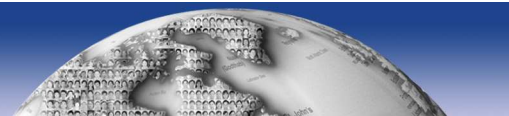
- . All test data referenced to 25°C ambient
- . Rated current(Irms) will cause the coil temperature rise
- . approximate Δt of 40°C
- . Operating temperature : -40°C to 125°C. (Including coils self-temperature rise)
- . Storage temperature Component: -40°C to 85°C.

Product Identification :

SMT LF 251508 Q - 100uH





(1) (2) (3) (4) (5)

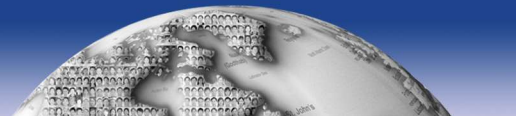
- (1) Type : **Surface Mountable Type** .
- (2) Series : Common mode Line Filter
- (3) Dimensions : **251508** is size
- (4) Design : Code
- (5) Inductance: 100uH.



● SMTLF251508Q-SERIES

Part No.	Inductance 1-4=2-3 (uH)	DC Resistance (Ω) Max.	Rated Current (mA)Max.	Hi-Pot (Vac) 3mA/1S	Rated Voltage (V) Typ	Maximum Impedance (Ω)Typ
SMTLF251508Q-100uH	10	0.24	300	250	80	1200
SMTLF251508Q-470uH	47	0.16	300	250	80	300
SMTLF251508Q-510uH	51	0.16	300	250	80	300
SMTLF251508Q-820uH	82	0.2	300	250	80	440
SMTLF251508Q-101uH	100	0.22	300	250	80	500
SMTLF251508Q-181uH	180	0.25	300	250	80	1000
SMTLF251508Q-221uH	220	0.28	300	250	80	1200
SMTLF251508Q-331uH	330	0.30	300	250	80	2000

-  Tolerance of Inductance: $\pm 50\%$
-  Test frequency and voltage: 10KHz, 0.1Vrms
-  All test data referenced to 25°C ambient
-  Heat rated current(Irms) will cause the coil temperature rise approximate Δt of 40°C



SMTLF953Q SERIES

SMT COMMON MODE FILTER.

Applications :

- Preventive measure against common mode noise radiation emissions from power line or else
- Best for high current circuit such as car, wireless charging and power device design.
- Industrial application



Features :

- High rated currents, reduced components height
- Wire wound constructure common mode choke with best EMI suppression effect high impedance
- RoHS/HF compliant

Shape and Dimensions (Dimensions are in mm) :

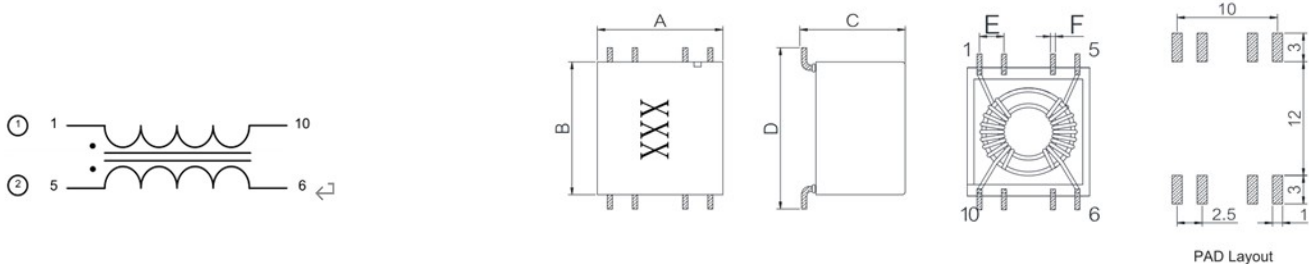


Fig.1

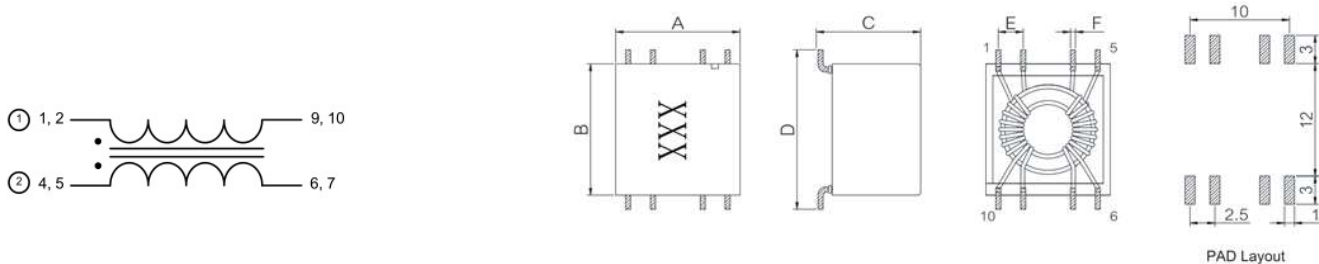


Fig.2

Item	A Max	B Max	C Max	D Max	E	F
SMTLF953Q	13.0	14.5	11.0	18.0	2.5+/-0.3	0.5+/-0.1

Characteristics :

- All test data referenced to 25°C ambient
- Rated current will cause the coil temperature rise approximate Δt of 40°C
- Operating temperature : -40°C to 125°C. (Including coils self-temperature rise)
- Storage temperature Component: -40°C to 85°C.

Product Identification :

SMT LF 953 Q - 121 N

(1) (2) (3) (4) (5) (6)

(1)Type : **Surface Mountable Type** .

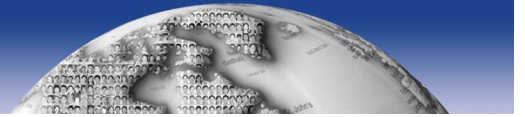
(2) Series :Common mode Line Filter

(3) Dimensions :**953**is Core's size

(4) Design : Code

(5) Inductance : 121 for 120 uH

(6) Tolerance code : M:±20% ;N:±30%

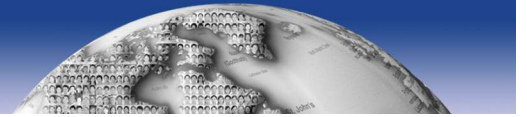


● SMTLF953Q-SERIES

Part No.	Inductance L1=L2 (uH)	DC Resistance (mΩ) Max.	Rated Current (A)Max.	Hi-Pot (Vac) 3mA/1S	Rated Voltage (V) Typ	Leakage Inductance (nH)Typ	Marking	FIG
SMTLF953Q-130N	13	2.7	10	500	80	110	130	2
SMTLF953Q-560N	56	4.7	7	500	80	330	560	2
SMTLF953Q-121N	120	10.5	5.5	500	80	680	121	2
SMTLF953Q-321N	320	29	3.25	500	80	2200	321	1
SMTLF953Q-152N	1500	120	1.5	500	80	13000	152	1
SMTLF953Q-472N	4700	520	0.75	500	80	25000	472	1
SMTLF953Q-103N	10000	920	0.5	500	80	83000	103	1
SMTLF953Q-283N	28000	2800	0.3	500	80	220000	283	1
SMTLF953Q-473N	47000	4000	0.25	500	80	460000	473	1
SMTLF953Q-683N	68000	5000	0.2	500	80	960000	683	1
SMTLF953Q-104N	100000	8500	0.15	500	80	-	104	1

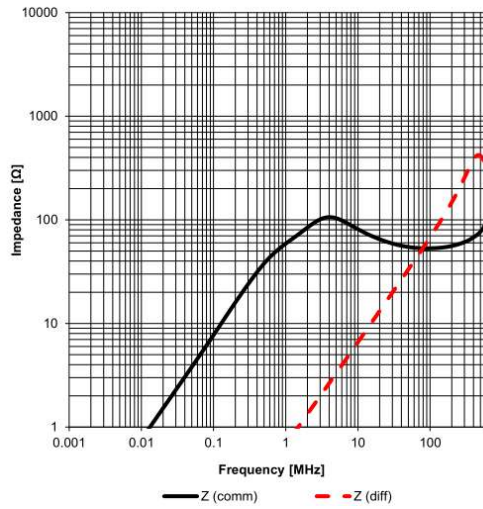
Note:

- Tolerance of Inductance: M= $\pm 20\%$, N= $\pm 30\%$
- Test Inductance: 10KHz, 0.05Vrms
- Test Leakage Inductance: 1MHz, 1mA

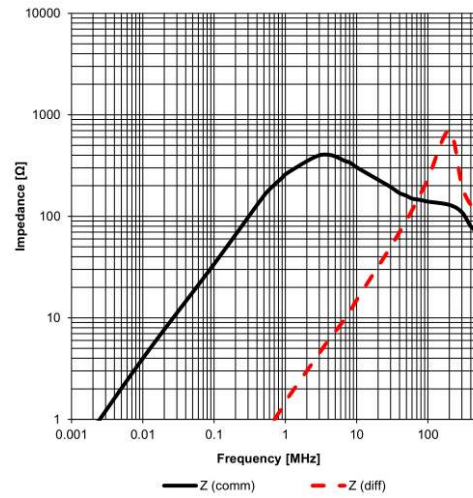


● Typical Impedance Characteristics

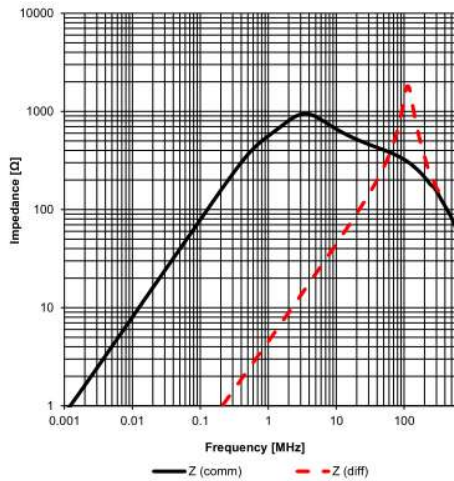
SMTLF953Q-130N



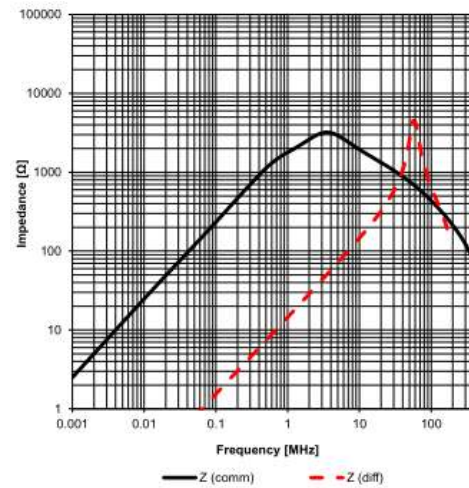
SMTLF953Q-560N



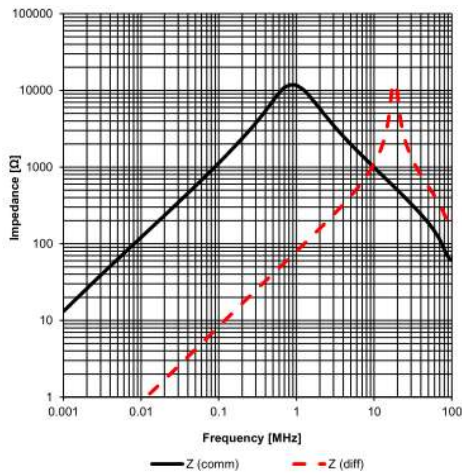
SMTLF953Q-121N



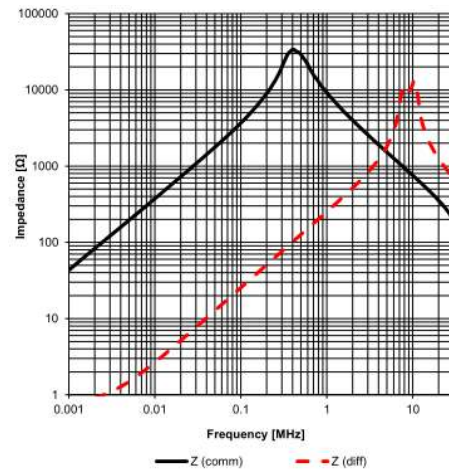
SMTLF953Q-321N

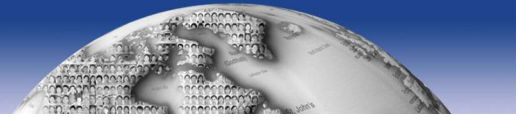


SMTLF953Q-152N



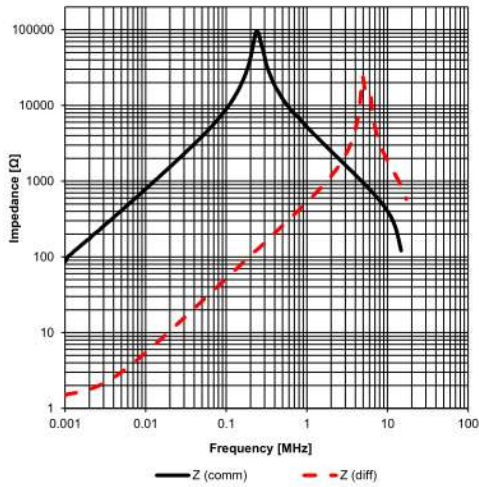
SMTLF953Q-472N



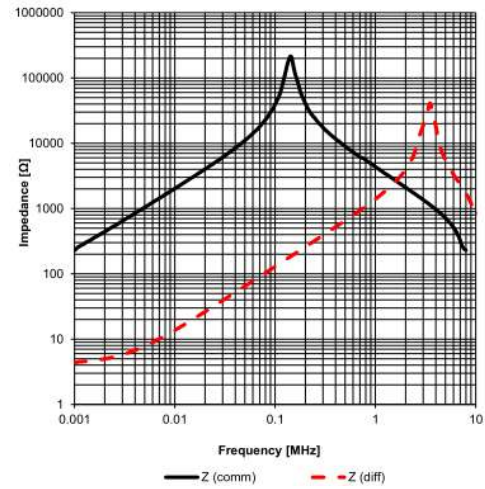


● Typical Impedance Characteristics

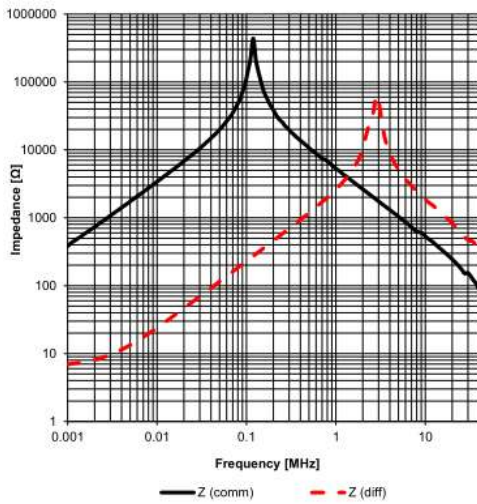
SMTLF953Q-103N



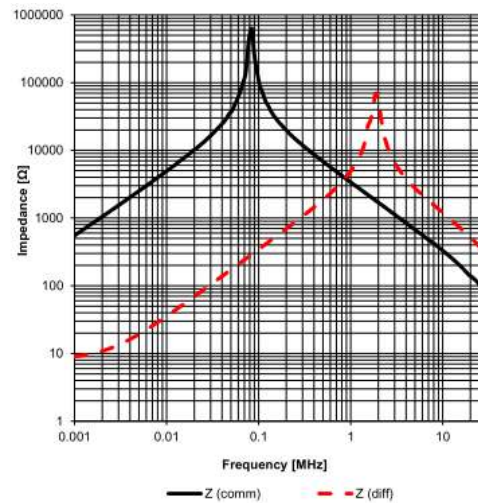
SMTLF953Q-283N



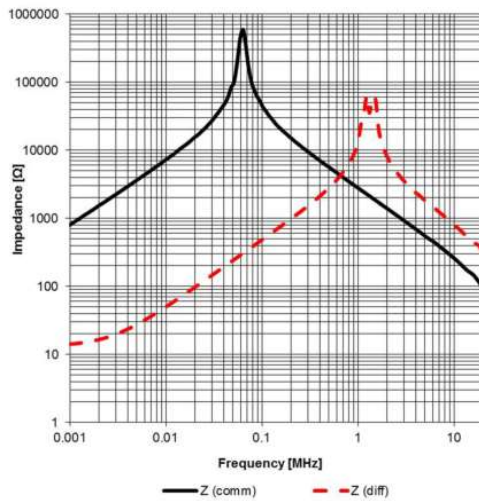
SMTLF953Q-473N

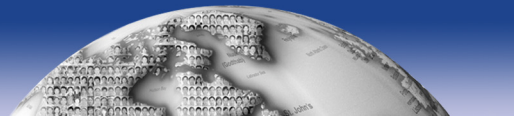


SMTLF953Q-683N



SMTLF953Q-104N





SMTLF633Q/643Q SERIES

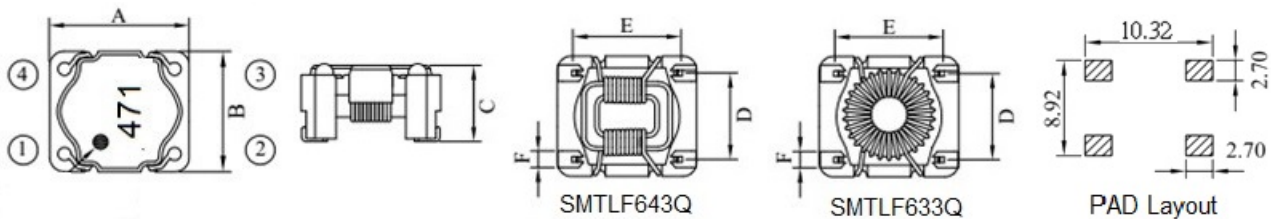
Common Mode Line Filter

Applications :

- Signal and DC common mode choke coils.
- radiation emissions from power line or else.
- Digital communication equipment



Shape and Dimensions (Dimensions are in mm) :



Item	A	B	C Max	D	E	F
633Q	10 \pm 0.5	8.7 \pm 0.3	6.5	6.22 \pm 0.1	7.62 \pm 0.1	1.4Ref
643Q	10 \pm 0.5	8.7 \pm 0.3	6.5	6.22 \pm 0.1	7.62 \pm 0.1	1.4Ref

Features :

- Compact design
- High rated currents, reduced components height.
- Ideal inductors for DC-DC conversion.
- Available on tape and reel for auto surface mounting.
- RoHS/HF compliant.
- with best EMI suppression effect high impedance

Characteristics :

- IDC: The current when temperature of coil increase up to max. $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$)
- Operating Temperature : -25°C to 85°C .
- Storage temperature Component: -20°C to $+40^{\circ}\text{C}$ 75% RH max.

Product Identification :

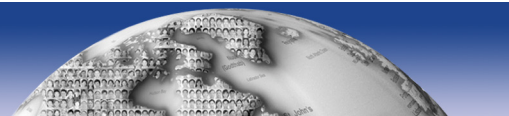
SMT LF 633 Q 110 - UH

(1) (2) (3) (4) (5) (6)

- (1) Type: Surface Mountable Type.
- (2) Series :Common mode Line Filter.
- (3) Dimensions :633 is size.
- (4) Q: Internal code
- (5) Inductance: 110 for 11uH
- (6) Inductance unit

Test equipments :

- L: Agilent4285A Precision LCR Meter
- DCR: Milli-ohm meter.
- Impedance: Agilent E4991A RF Impedance analyzer. with Agilent 16197A test fixture
- Rated Volt: Extech7142 Hipot/Insulation Tester .
- Electrical specifications at 25°C .



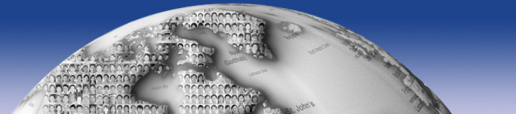
● **SMTLF633Q - Series:**

Part No.	L(uH) 100KHz 0.1V	DCR (mΩ) Max.	R.Current (A) Max	Hi-Pot(VAC) 3mA/1S	Impedance (Ω) Max.	Test.Freq (MHz)	Marking
SMTLF633Q-10UH	10±40%	30	4.00	600	100	10-300	•100
SMTLF633Q-22UH	22±40%	35	3.80	600	300	10-200	•220
SMTLF633Q-47UH	47±40%	40	3.2	600	800	10-100	•470
SMTLF633Q-2000UH	2000±40%	270	0.8	300	2000	0.5-15	•202
SMTLF633Q-2200UH	2200±40%	300	0.75	300	3400	1-11	•222
SMTLF633Q-3000UH	3000±40%	330	0.7	300	3000	0.5-10	•302
SMTLF633Q-3300UH	3300±40%	360	0.65	300	4400	0.9-7	•332
SMTLF633Q-3900UH	3900±40%	540	0.52	300	5000	0.7-6	•392
SMTLF633Q-4000UH	4000±40%	600	0.45	300	4000	0.5-5	•402
SMTLF633Q-4700UH	4700±40%	720	0.35	300	6200	0.6-3	•472
SMTLF633Q-5000UH	5000±40%	780	0.30	300	5000	0.5-3	•502

● **SMTLFD643Q - Series**

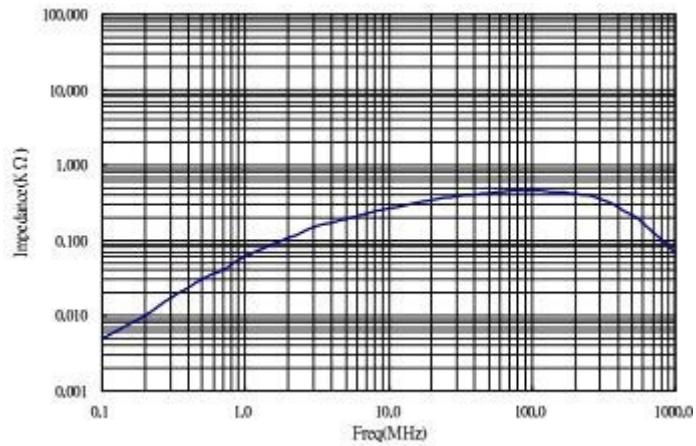
Part No.	L(uH) 100KHz 0.1V	DCR (mΩ) Max.	R.Current (A) Max	Hi-Pot(VAC) 3mA/1S	Impedance (Ω) Max.	Test.Freq (MHz)	Marking
SMTLFD643Q-100UH	100±40%	25	3.00	1000	100	10-300	•101
SMTLFD643Q-120UH	120±40%	25	2.50	1000	200	10-200	•121
SMTLFD643Q-220UH	220±40%	32	2.20	1000	350	7-150	•221
SMTLFD643Q-250UH	250±40%	35	2.00	1000	400	5-100	•251
SMTLFD643Q-470UH	470±40%	65	1.60	1000	900	2-40	•471
SMTLFD643Q-500UH	500±40%	70	1.50	1000	800	2-50	•501
SMTLFD643Q-1000UH	1000±40%	180	0.95	1000	1400	1-40	•102

* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

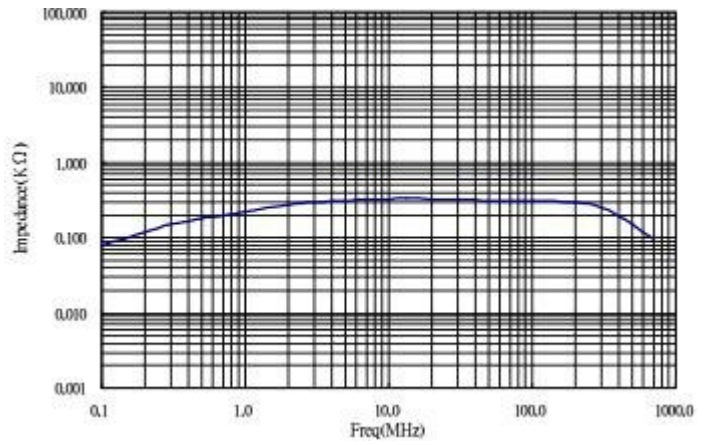


● Typical performance curves

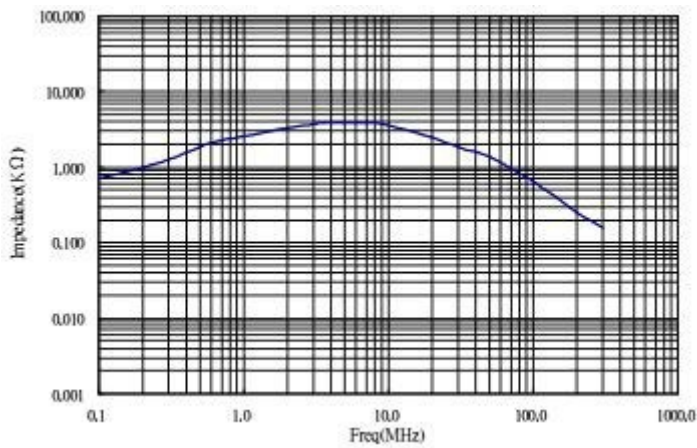
SMTLF633Q-10UH



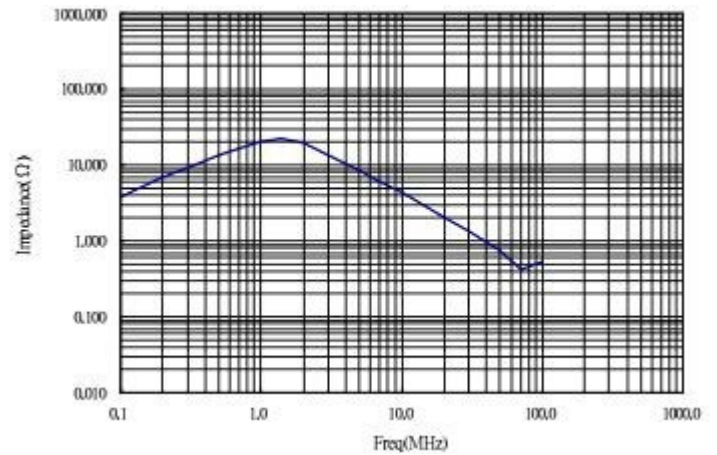
SMTLFD643Q-100UH

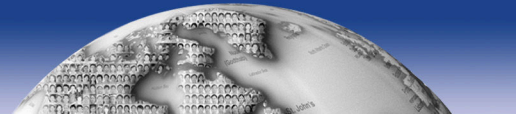


SMTLFD643Q-1000UH



SMTLF633Q-5000UH





SMTLF0416Q SERIES

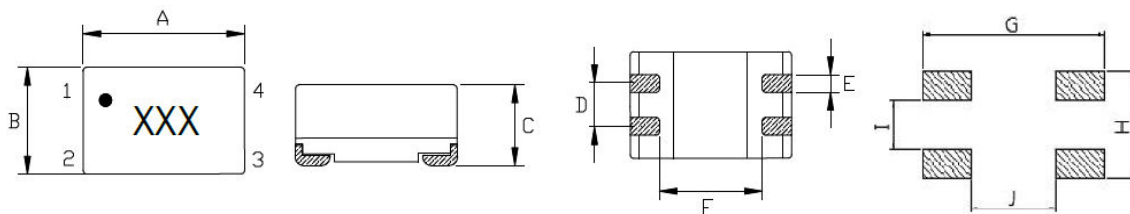
Common Mode Line Filter

Applications :

- Preventive measure against common mode noise.
- radiation emissions from power line or else. Best for high current circuit such as wireless charging and power device design. Industrial applications.



Shape and Dimensions (Dimensions are in mm) :



Item	A	B	C	D	E	F	G	H	I	J
0416Q	9.2+/-0.3	6.0+/-0.3	5+/-0.3	2.54+/-0.2	1+/-0.1	5.7Typ	9.5Typ	3.74Typ	1.34Typ	5.5Typ

Features :

- High rated currents, reduced components height
- Wire wound constructure common mode choke
- with best EMI suppression effect high impedance
- Compact design
- Ideal inductors for DC-DC conversion.
- RoHS/HF compliant.
- Available on tape and reel for auto surface mounting.

Characteristics :

- IDC: The current when temperature of coil increase up to max. $\Delta T=40^{\circ}\text{C}$ ($T_a=20^{\circ}\text{C}$)
- Rated voltage: DC 50V.
- Insulation resistance :10M Ω Min(100VDC,between Lines) .
- Operating Temperature : -25 $^{\circ}\text{C}$ to 85 $^{\circ}\text{C}$.

Product Identification :

SMT LF -0416Q -100 - N
(1) (2) (3) (4) (5)

(1)Type : Surface Mountable Type.

(2) Series :Common mode Line Filter. (3)

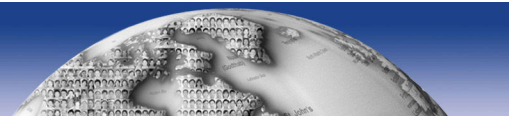
Dimensions :0416Q is size.

(4) Inductance: 100 for 10uH

(5) Inductance tolerance : "N": $\pm 50\%$ or $+50\%/-30\%$

Test equipments :

- L: Agilent4285A Precision LCR Meter
- DCR: Milli-ohm meter.
- Impedance: Agilent E4991A RF Impedance analyzer. with Agilent 16197A test fixture
- Rated Volt&IR: Extech7142 Hipot/Insulation Tester .
- Electrical specifications at 25 $^{\circ}\text{C}$.



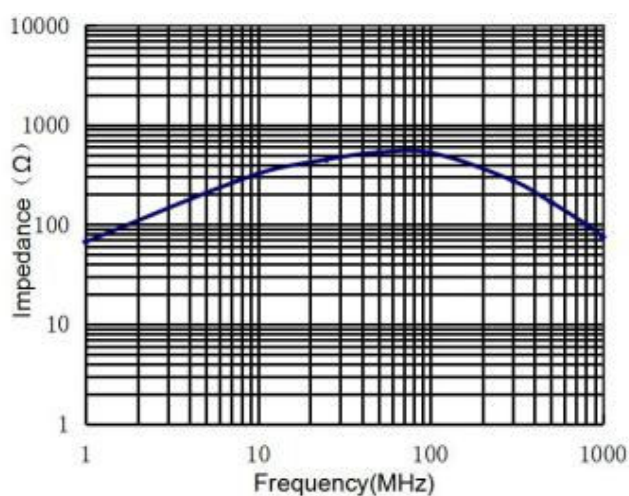
● SMTLF0416Q - series

Part No.	L1=L2 (UH)	Test.Freq (MHz)	DCR (Ω) Max.	R.Curren (A) Max	Volt Max	Impedance (Ω) Min.	Test.Freq (MHz)	IR (Ω)Min.
SMTLF0416Q-100N	10+-50%/-30%	1KHz/0.1V	0.08	1.6	50	300	20-200	10M
SMTLF0416Q-250N	25+50%/-30%	1KHz/0.1V	0.16	1.0	50	600	5-100	10M
SMTLF0416Q-400N	40+50%/-30%	1KHz/0.1V	0.25	0.9	50	800	5-100	10M
SMTLF0416Q-510N	51+50%/-30%	1KHz/0.1V	0.32	0.8	50	1000	5-50	10M
SMTLF0416Q-251N	250+-50%	100KHz/0.05V	0.13	1.2	50	600	5-50	10M
SMTLF0416Q-471N	470+-50%	100KHz/0.05V	0.14	1.1	50	800	1-50	10M
SMTLF0416Q-501N	500+-50%	100KHz/0.05V	0.15	1.0	50	900	1-40	10M
SMTLF0416Q-102N	1000+-50%	100KHz/0.05V	0.31	0.8	50	1000	1-30	10M
SMTLF0416Q-202N	2000+-50%	100KHz/0.05V	0.42	0.6	50	3000	1-10	10M
SMTLF0416Q-472N	4700+-50%	100KHz/0.05V	0.90	0.4	50	3000	0.5-5	10M
SMTLF0416Q-652N	6500+-50%	100KHz/0.05V	1.05	0.3	50	4000	0.3-2	10M

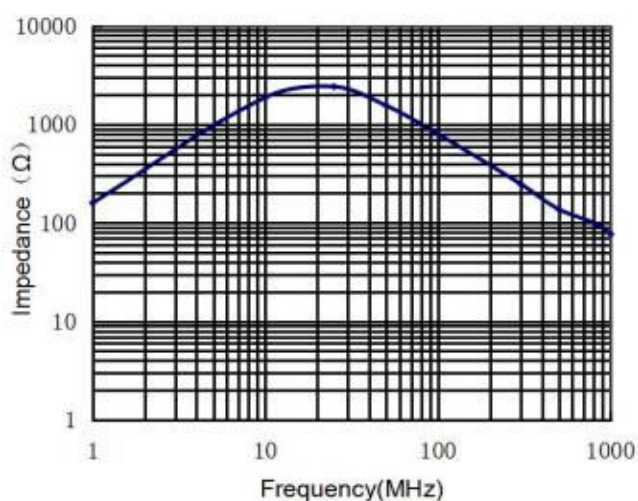
* Due to the limited space, the catalogue shows the typical specifications only. For more specific details (characteristics graph, reliability, and others), kindly invite you to access 3L official website www.3lcoil.com for better known.

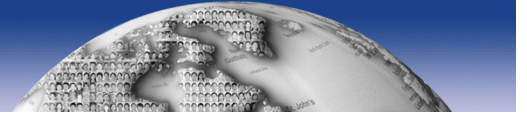
● Typical performance curves

SMTLF0416Q-100N



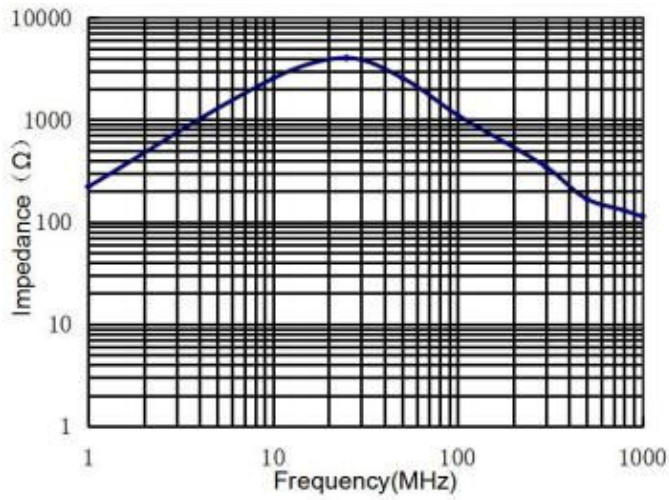
SMTLF0416Q-250N



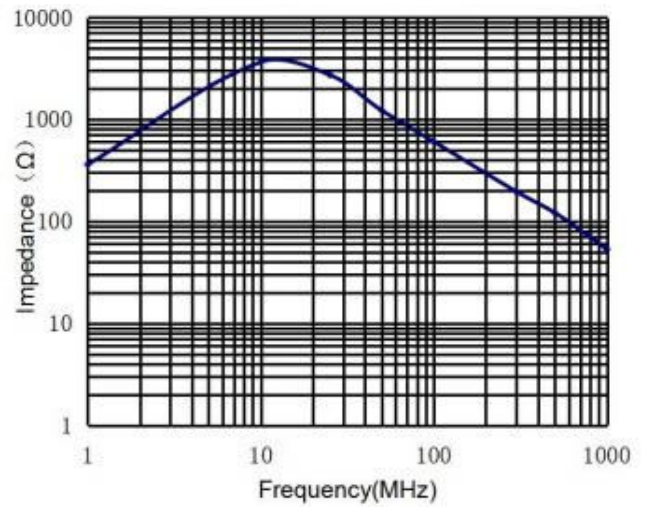


● Typical performance curves

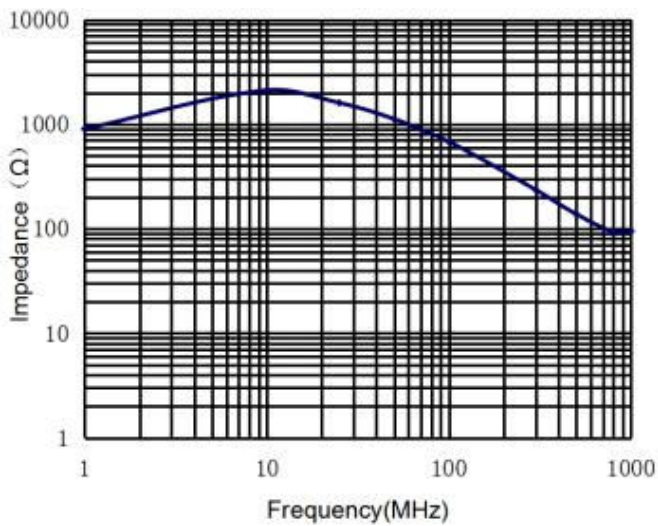
SMTLF0416Q-400N



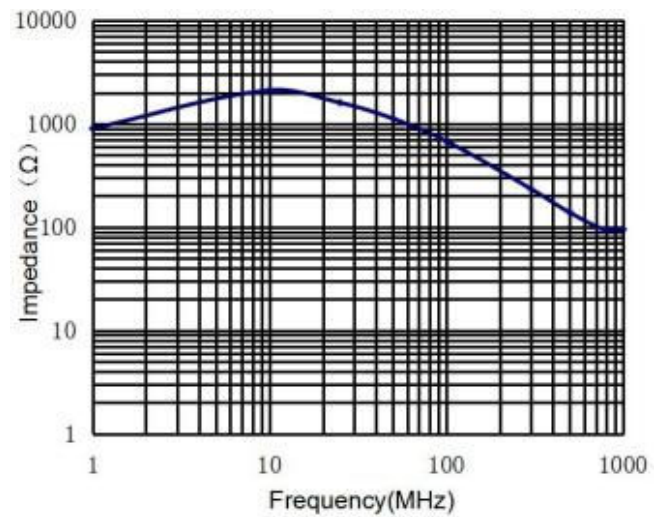
SMTLF0416Q-510N



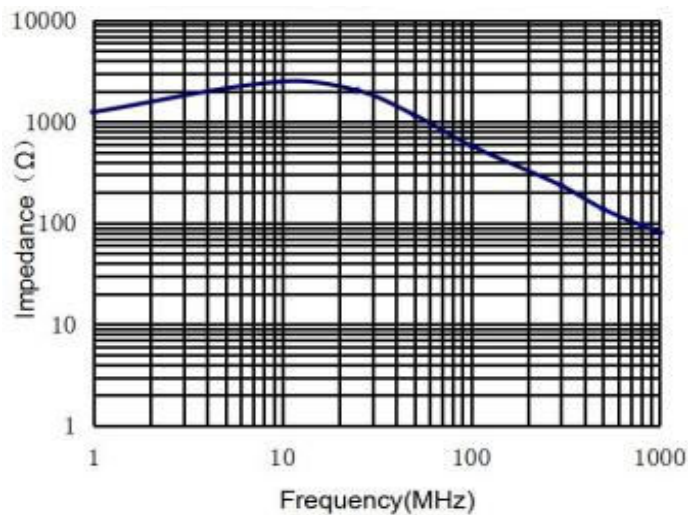
SMTLF0416Q-251N



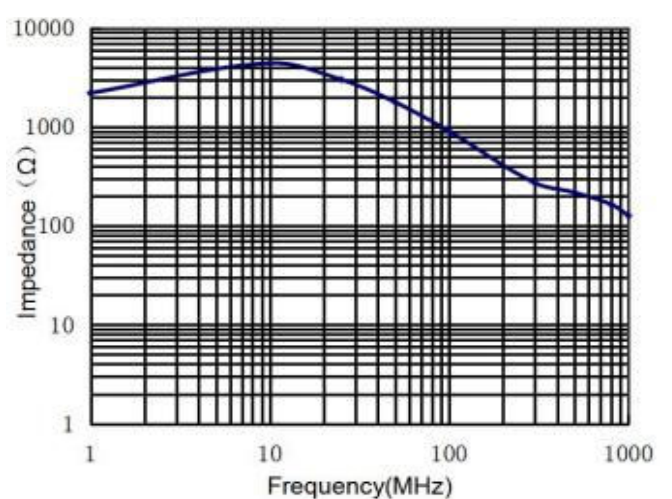
SMTLF0416Q-471N

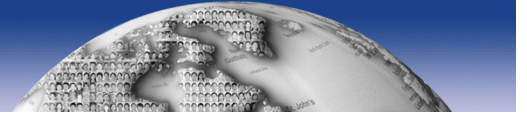


SMTLF0416Q-501N



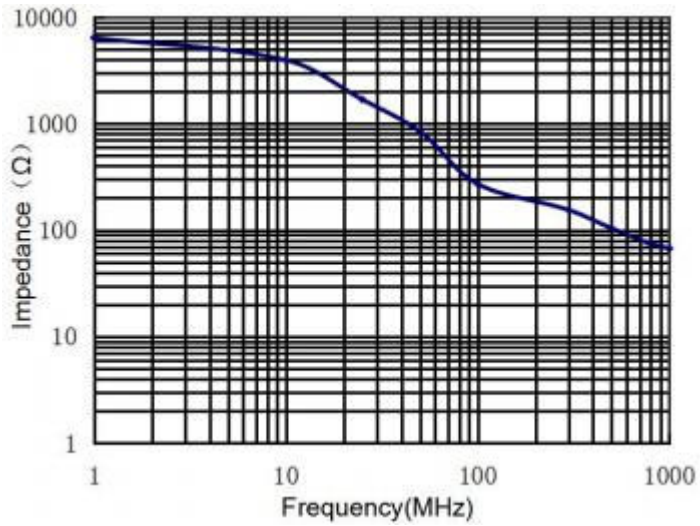
SMTLF0416Q-102N



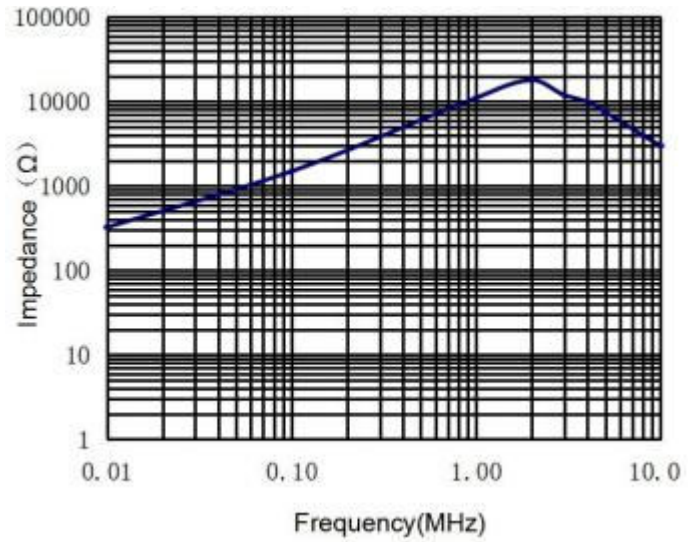


- Typical performance curves

SMTLF0416Q-202N



SMTLF0416Q-472N



SMTLF0416Q-652N

