

Wire-wound Common Mode Filter



◆ Features

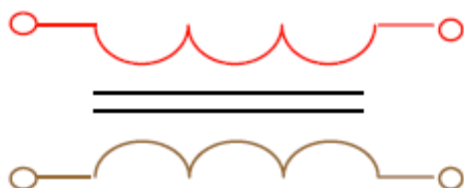
- 1、Powerful component with composite co-fired material to solve EMI problem for high-speed differential signal transmission line as USB, IEEE1394 and LVDS, without distortion to high speed signal transmission
- 2、High coupling constant : 0.99
- 3、Small size and low profile
- 4、Various common mode impedance items of 67 to 220 ohm can be used, considering noise level and signal frequency
- 5、Small dimension enable higher density packaging
- 6、RoHS Compliant.



◆ Application

- 1、Common mode noise suppression of signal lines in high speed and high density digital equipment;
- 2、USB2.0/3.0 of PC, peripheral equipments, small digital AV equipments, etc.

◆ Equivalent Circuit Diagram



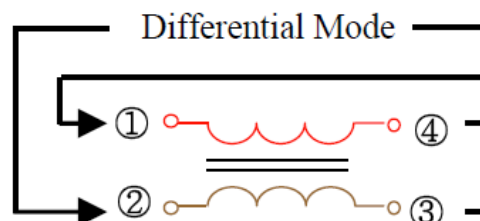
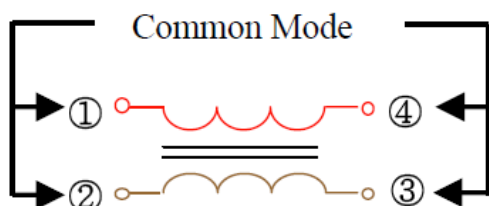
◆ Impedance :

Measured by using Agilent E4991A RF Impedance Analyzer

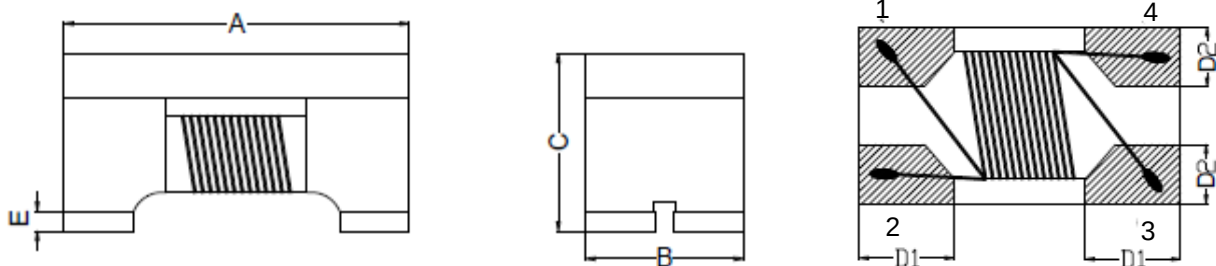
◆ PRODUCT IDENTIFICATION

SMW	2012	B	900	D	T	E
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series Type
- (2) Chip Size (mm) :Length X Width
- (3) Material type : With magnetic shield(B/D/H)
- (4) Nominal Impedance:900=90Ω;
101=100Ω
- (5) Rated Current: A=250mA; B=300mA;C=350mA;
D=400mA; E=1000mA;F=1500mA
G=3000mA
- (6) Company Code
- (7) Packaging: P – Embossed paper tape, 7" reel
E – Embossed plastic tape, 7" reel
T – Tape & reel



◆ Dimensions Unit: mm



Series	A(mm)	B(mm)	C(mm)	D1(mm)	D2(mm)	E(mm)
SMW1608	1.6 ± 0.1	0.8 ± 0.1	1.1 ± 0.1	0.33±0.1	0.25±0.1	0.12±0.1
SMW2012	2.0±0.2	1.2±0.2	1.2±0.2	0.55±0.1	0.46±0.1	0.15±0.1
SMW3216	3.2±0.2	1.6±0.2	1.9±0.2	0.6±0.1	0.6±0.1	0.17±0.1
SMW4532	4.5±0.2	3.2±0.2	2.8±0.2	1.2±0.1	1.0±0.1	0.19±0.1

◆ Specifications

Part Number	Common mode Impedance Z(Ω)	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA)	Rated Volt. (Vdc)	Withstand Volt. (Vdc)	IR (Ω) min.
SMW1608B Series							
SMW1608B670BTE	67 ± 25%	100	0.30	300	50	125	10M
SMW1608B900BTE	90 ± 25%	100	0.30	300	50	125	10M
SMW1608B121ATE	120 ± 25%	100	0.36	250	50	125	10M
SMW1608B161ATE	160 ± 25%	100	0.40	250	50	125	10M
SMW1608B221ATE	220 ± 25%	100	0.42	250	50	125	10M
SMW2012B Series							
SMW2012B300DTE	30 ± 25%	100	0.20	450	50	125	10M
SMW2012B670DTE	67 ± 25%	100	0.25	400	50	125	10M
SMW2012B750DTE	75 ± 25%	100	0.25	400	50	125	10M
SMW2012B900DTE	90 ± 25%	100	0.30	400	50	125	10M
SMW2012B121DTE	120 ± 25%	100	0.30	400	50	125	10M
SMW2012B161CTE	160 ± 25%	100	0.35	350	50	125	10M
SMW2012B181CTE	180 ± 25%	100	0.35	350	50	125	10M
SMW2012B201BTE	200 ± 25%	100	0.40	300	50	125	10M
SMW2012B221BTE	220 ± 25%	100	0.40	300	50	125	10M
SMW2012B261BTE	260 ± 25%	100	0.40	300	50	125	10M
SMW2012B361BTE	360 ± 25%	100	0.45	300	50	125	10M
SMW2012B371BTE	370 ± 25%	100	0.45	300	50	125	10M

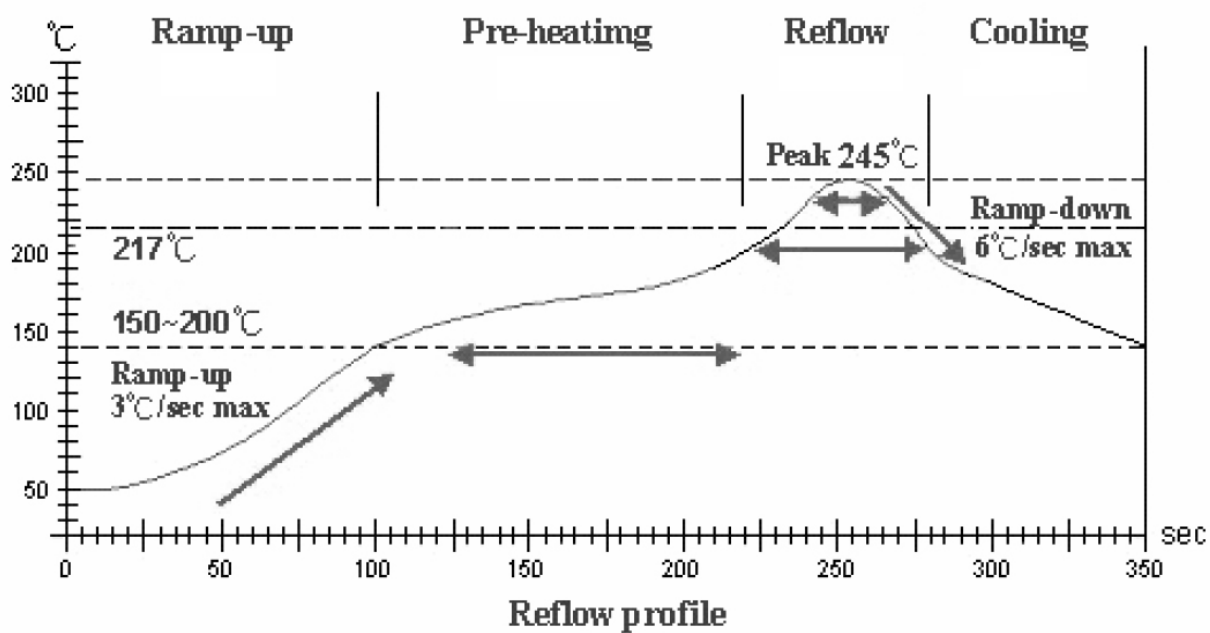
◆ Specifications

Part Number	Common mode Impedance Z(Ω)	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA)	Rated Volt. (Vdc)	Withstand Volt. (Vdc)	IR (Ω) min.
SMW3216B Series							
SMW3216B900DTE	90±25%	100	0.30	450	50	125	20M
SMW3216B121DTE	120±25%	100	0.35	400	50	125	10M
SMW3216B161CTE	160±25%	100	0.40	350	50	125	10M
SMW3216B201CTE	200±25%	100	0.45	350	50	125	10M
SMW3216B221BTE	220±25%	100	0.45	300	50	125	10M
SMW3216B261BTE	260±25%	100	0.50	300	50	125	10M
SMW3216B361BTE	360±25%	100	0.60	300	50	125	10M
SMW3216B601ATE	600±25%	100	0.80	250	50	125	10M
SMW3216B102ATE	1000±25%	100	1.00	250	50	125	10M
SMW3216B222ATE	2200±25%	100	1.20	250	50	125	10M
SMW4532B Series							
SMW4532B800GTE	80±25%	100	0.07	3000	50	125	10M
SMW4532B900GTE	90±25%	100	0.07	3000	50	125	10M
SMW4532B121GTE	120±25%	100	0.07	3000	50	125	10M
SMW4532B601FTE	600±25%	100	0.30	1500	50	125	10M
SMW4532B102ETE	1000±25%	100	0.40	1000	50	125	10M
SMW4532B142FTE	1400±25%	100	0.20	1500	50	125	10M

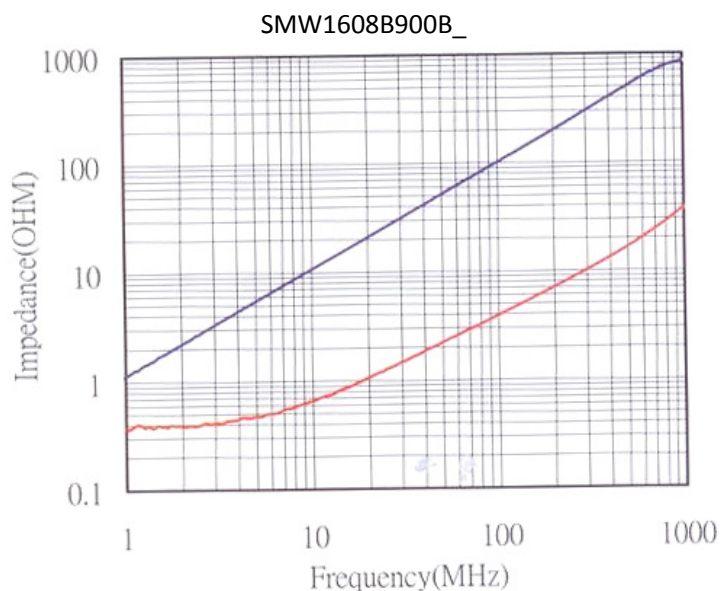
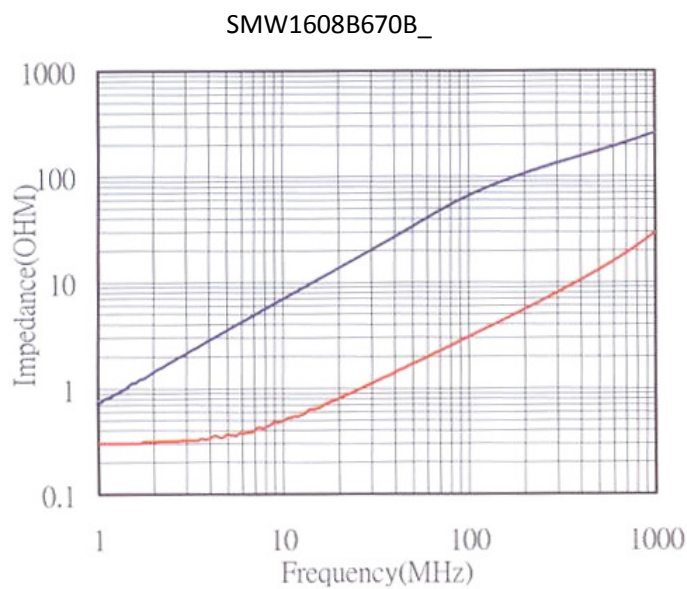
◆ General Technical Data

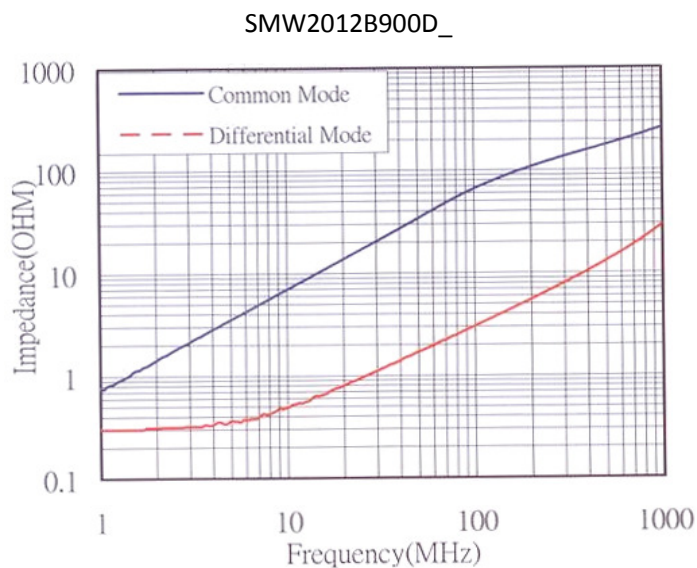
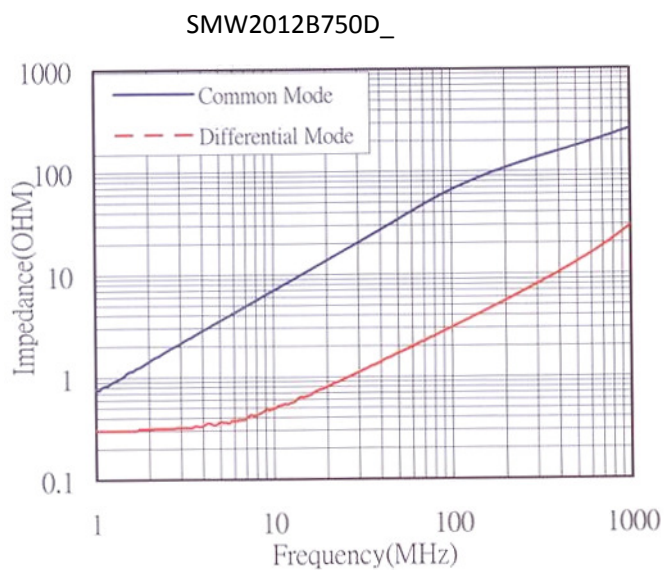
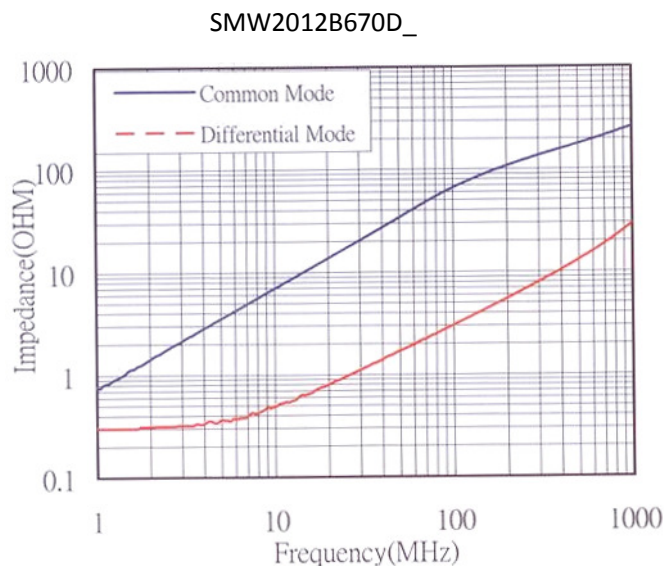
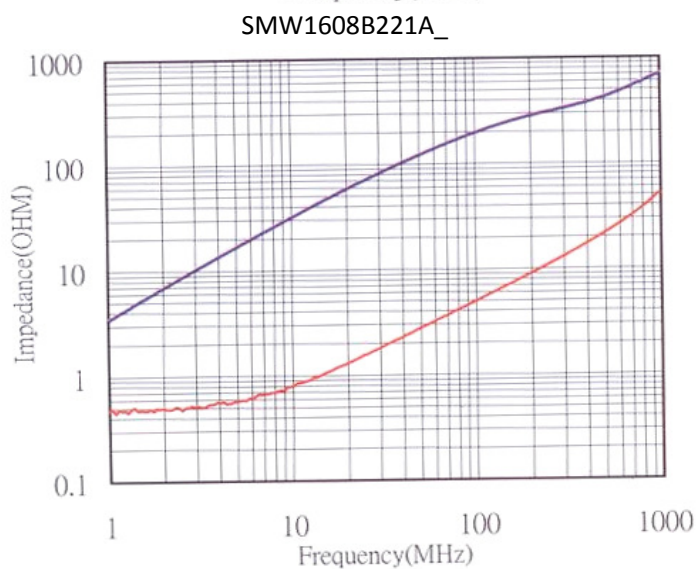
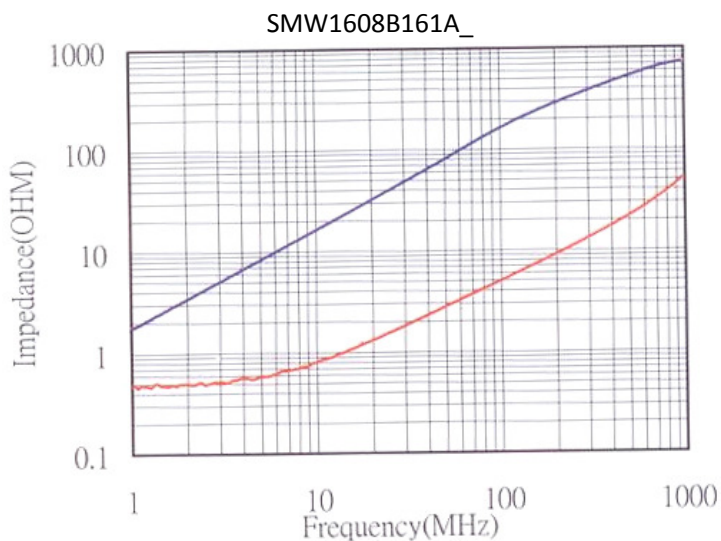
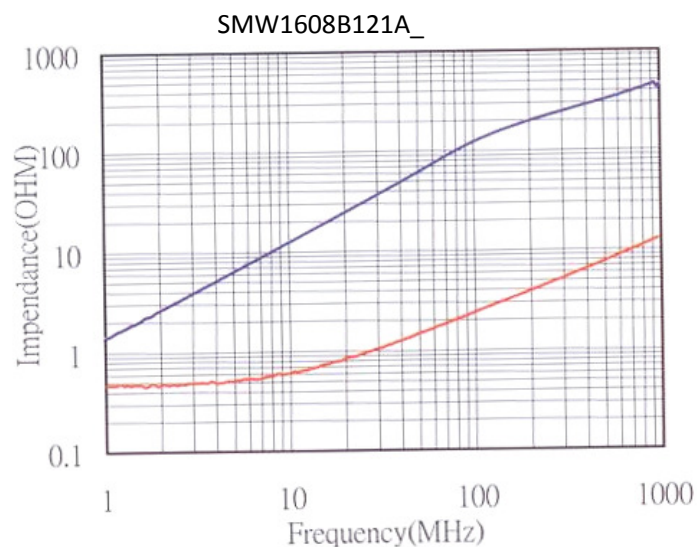
Operating Temperature Range	-25°C ~ +85°C
Storage Condition	20°C ~ 25°C and 65% RH (For Reference)

◆ Recommended soldering conditions

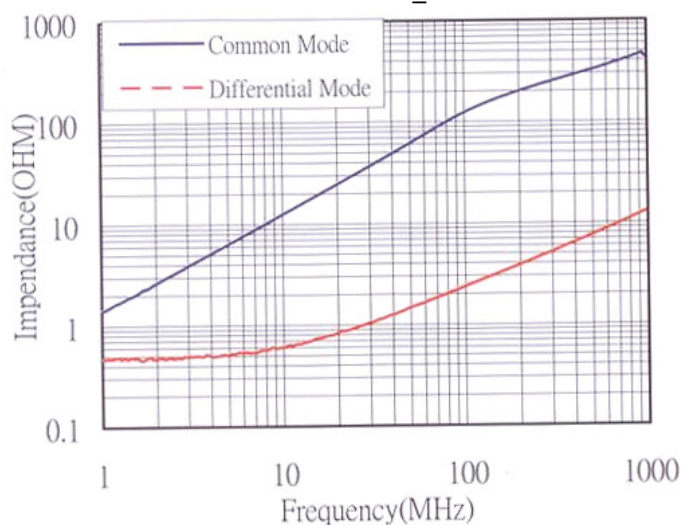


◆ Characteristics

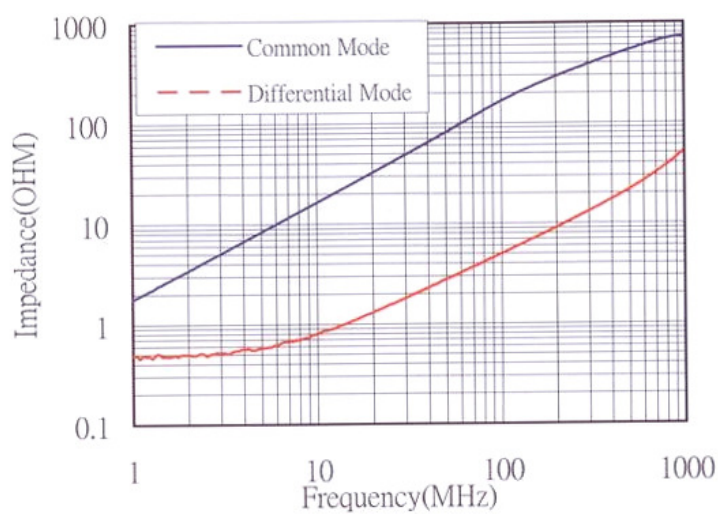




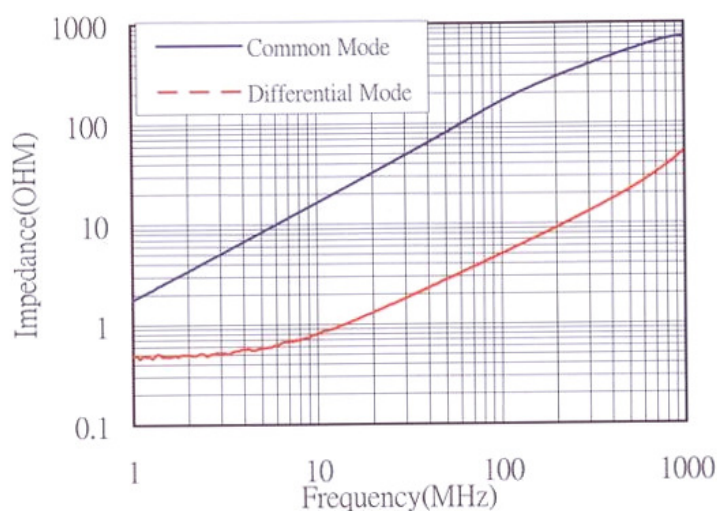
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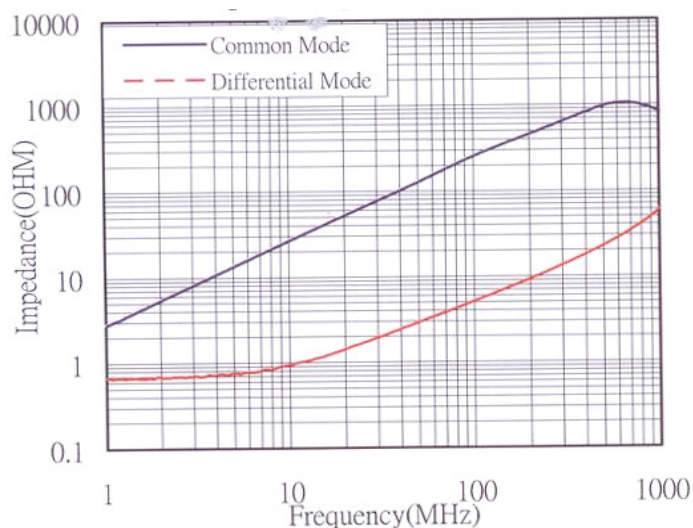
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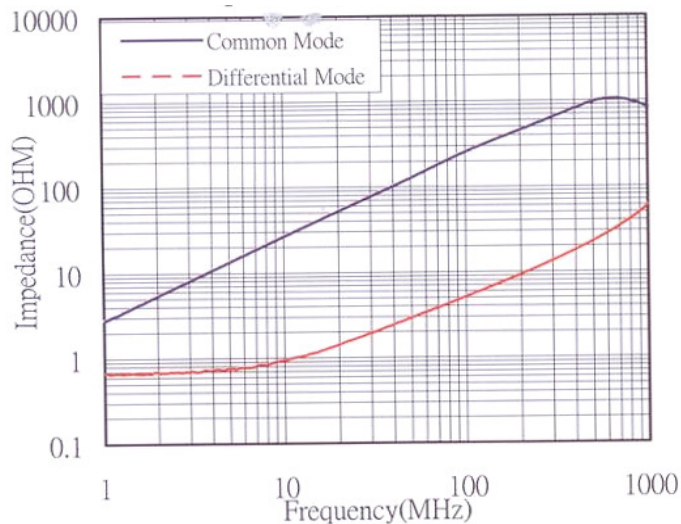
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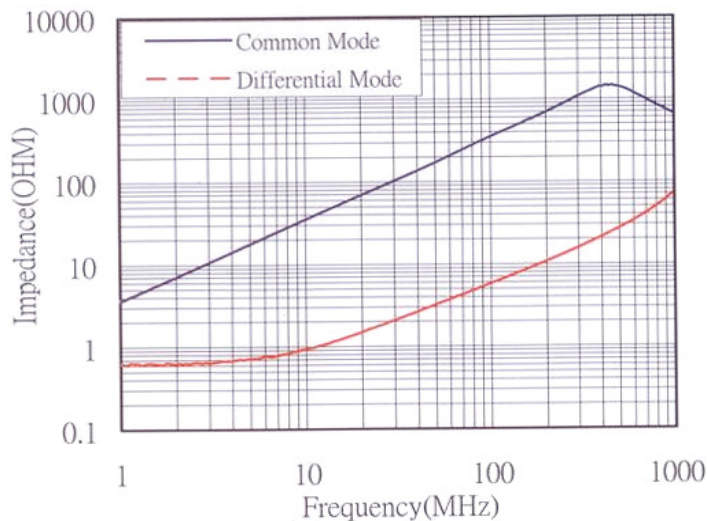
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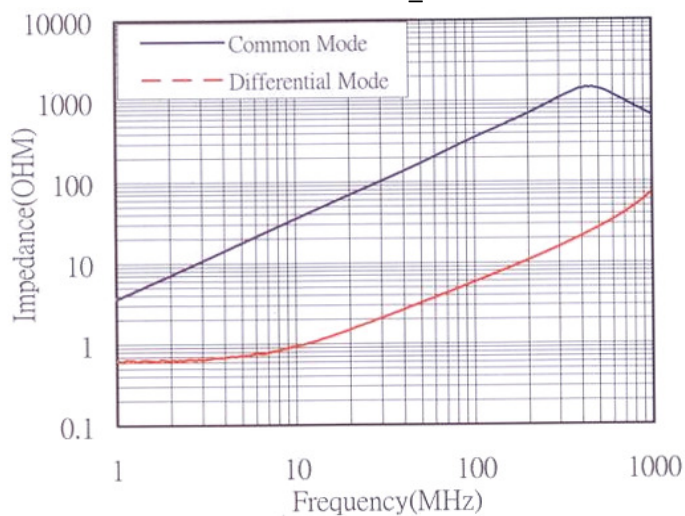
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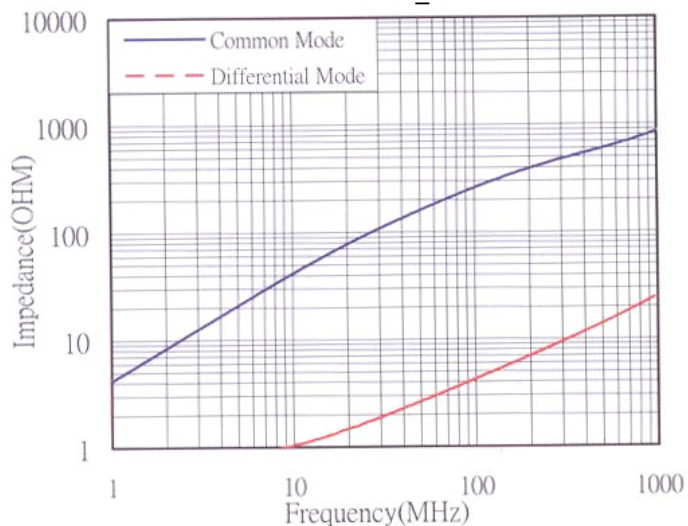
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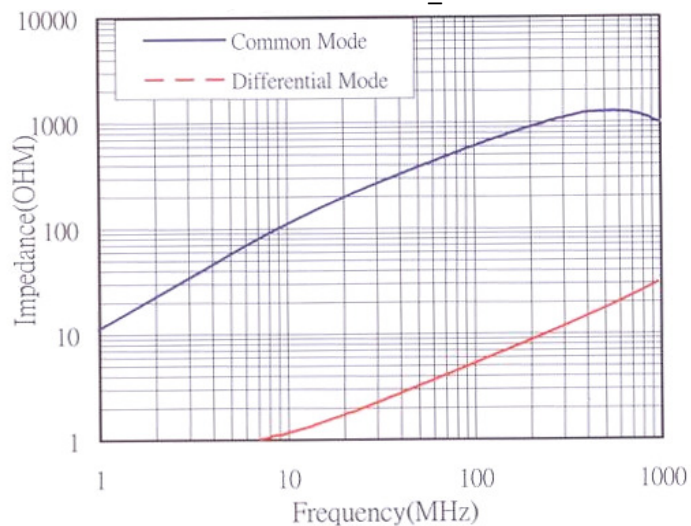
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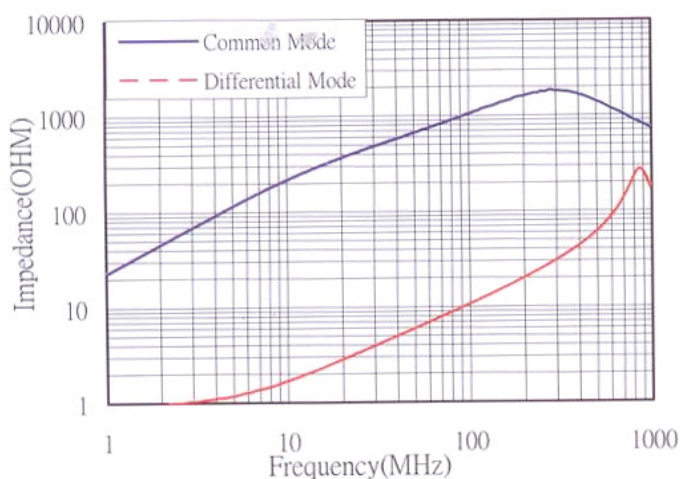
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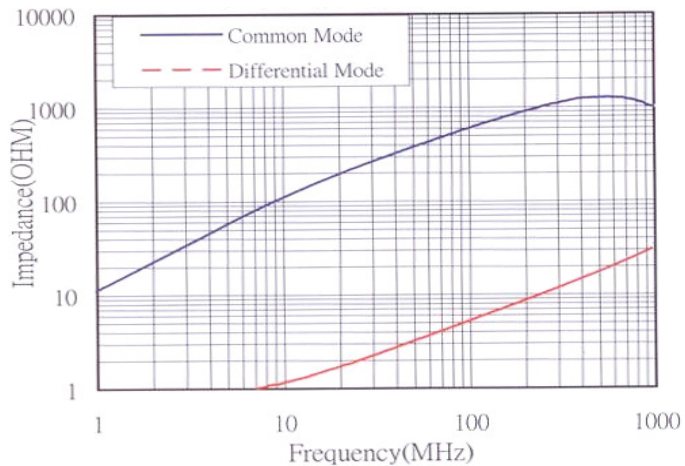
SMW3216B160C_



SMW3216B261B_

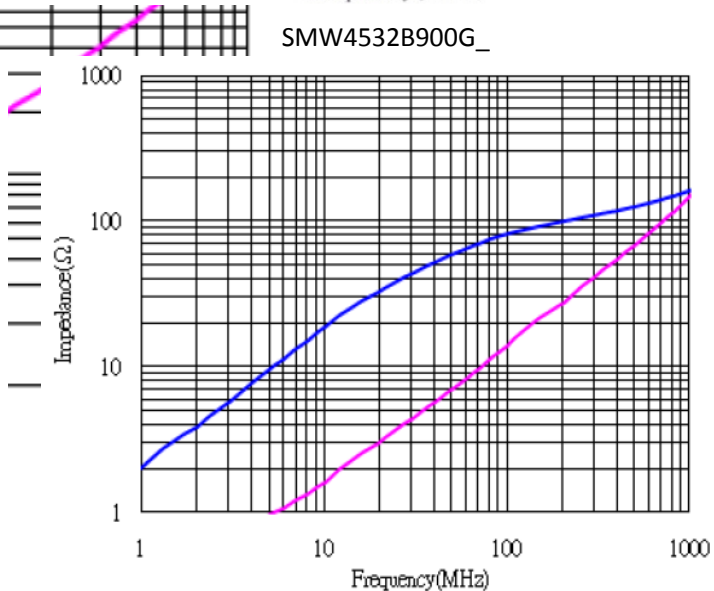
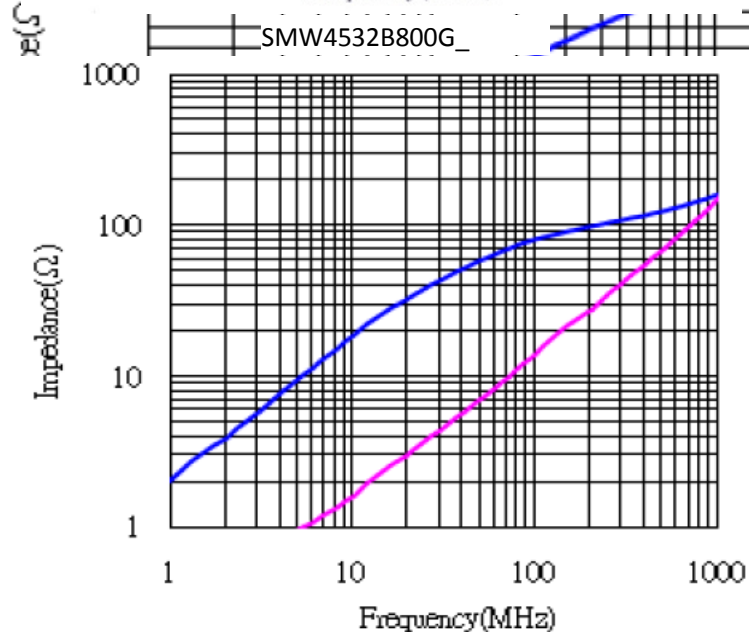
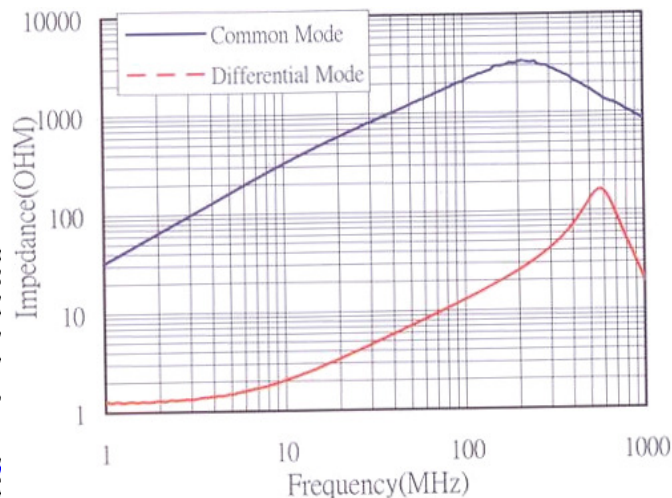
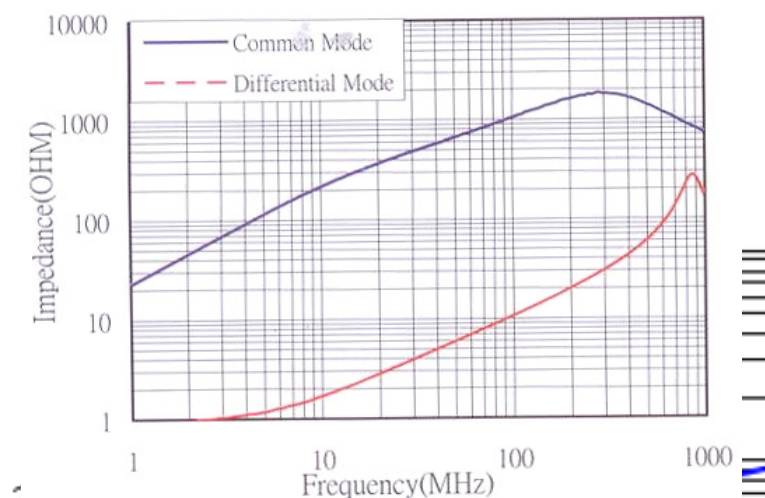


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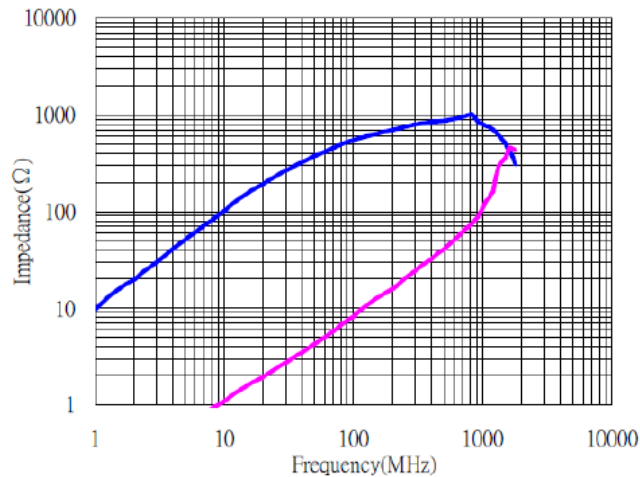
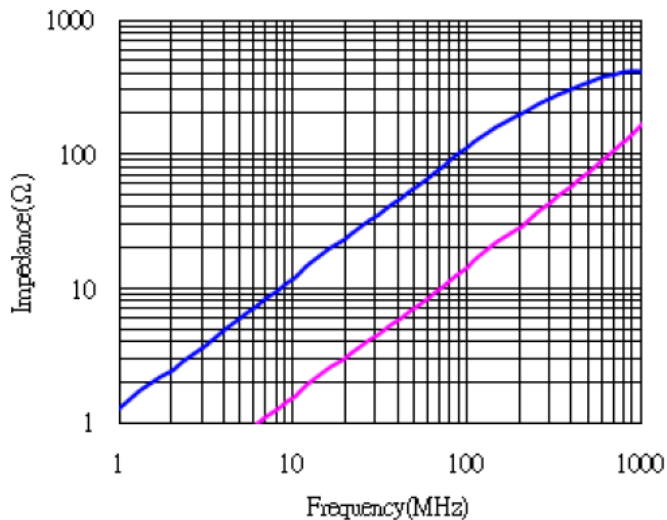
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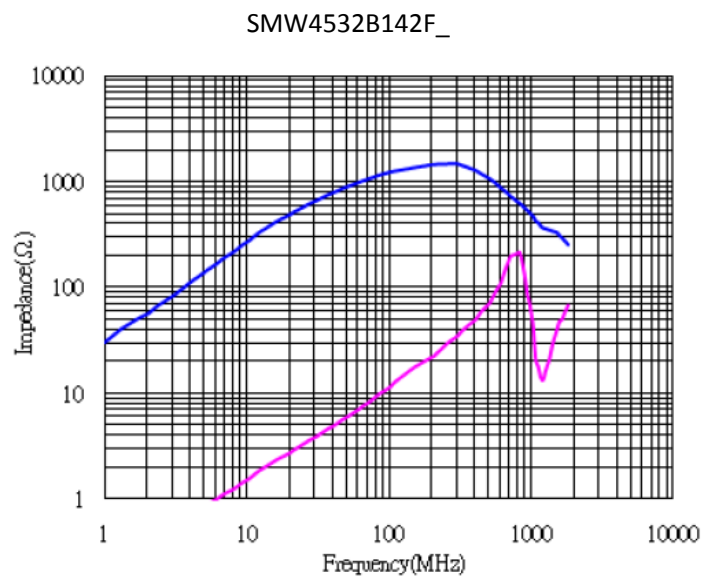
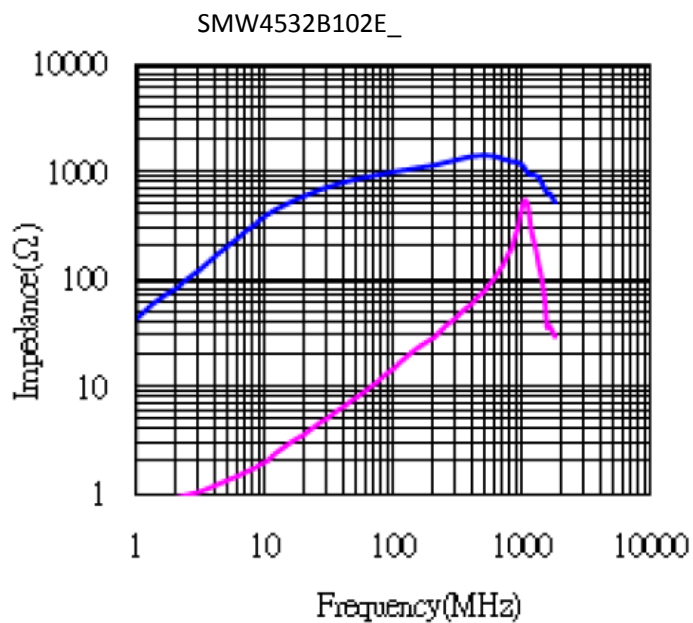
SMW3216B222A_



SMW4532B121G

SMW4532B601G





◆ Package

Size EIA (EIA)	1608 (0603)	2012 (0805)	3216 (1206)	4532 (1812)
Standard Packing Quantity (pcs / reel)	2,000	2,000	2,000	2,000