



# EMI Suppression Ferrite Chips and Arrays



**BLM02A, BLM03A, BLM15A, BLM18A and BLM21A Series - For General Use:** BLM-A Series generates an impedance from the relatively low frequencies. Therefore BLM-A Series is effective in noise suppression in the wide frequency range (30MHz – several hundred MHz).

**BLM03B, BLM15B, BLM18B and BLM21B Series - For High Speed Signal:** BLM-B Series can minimize attenuation of the signal waveform due to its sharp impedance characteristics. Various impedances are available to match signal frequency.

**BLM15E, BLM18E, BLM15H and BLM18H Series - For GHz Range Noise Suppression:** BLM-H/E Series has horizontal wire wound structure that minimizes stray capacitance and increases the effective frequency range.

**BLM15G Series - For High Frequency Noise Suppression over a Wide Frequency Range**

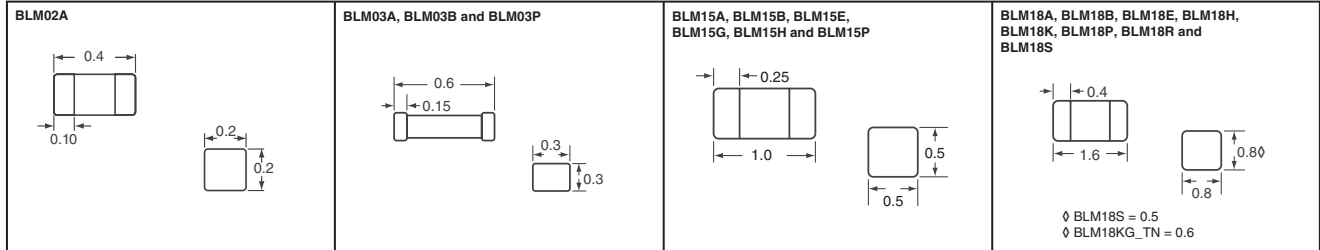
**BLM18K Series:** Can be used in high current circuits due to its low DC resistance.

**BLM03P, BLM15P, BLM18P, BLM21P, BLM31P, BLM41P and BLM18S Series - For Large Current:** BLM-P/S Series can be used in high current due to its low DC resistance. It can match power lines to a maximum of 6A DC.

**BLM18R Series:** Can be used in digital interface.

**BLA2AA and BLA2AB Series:** The BLA2AA/AB Series provides attenuation across a broad frequency range. Two types of impedance characteristics are available, one is for the general signal lines and the other is for high speed signal line. The BLA2 Series original inner electrode structure enables extra low crosstalk.

**BLA31A and BLA31B Series:** The BLA31A/B is capable of filtering 4 circuits in a 3216 package size. BLA31A/B is suitable for EMI suppression in smaller digital equipment.



E

Impedance (@ 100MHz) (Ω)	Rated Current (mA)	Digi-Key Part No.	Cut Tape Pricing (¢)			Tape and Reel Qty.		Murata Part No.
			10	50	100	Qty.	Pricing	
<b>BLM02 Series — 01005 Case Size</b>								
10 (Typ.)	500	490-5160-1-ND††	1.64	7.08	13.08	20,000	76.23/M	BLM02AG100SN1D
70 ±25%	250	490-5161-1-ND††	1.64	7.08	13.08	20,000	76.23/M	BLM02AG700SN1D
120 ±25%	200	490-5162-1-ND††	1.64	7.08	13.08	20,000	76.23/M	BLM02AG121SN1D
<b>BLM03 Series — 0201 Case Size</b>								
10 ±25%	300	490-5166-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BB100SN1D
10 (Typ.)	500	490-2555-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG100SN1D
22 ±25%	200	490-5167-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BB220SN1D
22 ±25%	900	490-5174-1-ND††	.65	2.83	5.22	15,000	30.50/M	BLM03PG220SN1D
33 ±25%	750	490-5175-1-ND††	.65	2.83	5.22	15,000	30.50/M	BLM03PG330SN1D
47 ±25%	200	490-5168-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BB470SN1D
70 (Typ.)	200	490-2556-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG700SN1D
75 ±25%	200	490-5169-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BB750SN1D
75 ±25%	300	490-5171-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BD750SN1D
80 ±25%	200	490-5163-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG800SN1D
120 ±25%	100	490-5170-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BB121SN1D
120 ±25%	200	490-2557-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG121SN1D
120 ±25%	250	490-5172-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BD121SN1D
240 ±25%	200	490-2558-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG241SN1D
240 ±25%	200	490-5173-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BD241SN1D
470 ±25%	215	490-5543-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BD471SN1D
600 ±25%	100	490-5164-1-ND††	.61	2.63	4.86	15,000	28.42/M	BLM03AG601SN1D
600 ±25%	200	490-5544-1-ND††	.62	2.68	4.95	15,000	29.11/M	BLM03BD601SN1D
1000 ±25%	100	490-5165-1-ND††	.69	2.97	5.49	15,000	31.88/M	BLM03AG102SN1D
<b>BLM15 Series — 0402 Case Size</b>								
5 ±25%	300	490-5179-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA050SN1D
5 ±25%	500	490-5185-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB050SN1D
10 ±25%	300	490-5180-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA100SN1D
10 ±25%	300	490-5186-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB100SN1D
10 (Typ.)	1000	490-5176-1-NDΔ	.36	1.57	2.89	10,000	16.64/M	BLM15AG100SN1D
10 (Typ.)	1740	490-5437-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX100SN1D
22 ±25%	300	490-5181-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA220SN1D
22 ±25%	300	490-5187-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB220SN1D
30 ±25%	2200	490-5200-1-NDΔ	.46	1.97	3.64	10,000	21.49/M	BLM15PD300SN1D
33 ±25%	300	490-5182-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA330SN1D
47 ±25%	200	490-5183-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA470SN1D
47 ±25%	300	490-5188-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB470SN1D
60 ±25%	1700	490-5201-1-NDΔ	.46	1.97	3.64	10,000	21.49/M	BLM15PD600SN1D
70 (Typ.)	500	490-5177-1-NDΔ	.36	1.57	2.89	10,000	16.64/M	BLM15AG700SN1D
70 ±25%	780	490-5438-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX700SN1D
75 ±25%	200	490-5184-1-NDΔ	.43	1.86	3.43	10,000	20.10/M	BLM15BA750SN1D
75 ±25%	200	490-5199-1-NDΔ	2.88	12.50	23.08	10,000	134.45/M	BLM15GA750SN1D
75 ±25%	300	490-5189-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB750SN1D
75 ±25%	300	490-5191-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BD750SN1D
80 ±25%	1500	490-5202-1-NDΔ	.46	1.97	3.64	10,000	21.49/M	BLM15PD800SN1D
120 ±25%	300	490-1008-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB121SN1D
120 ±25%	300	490-5192-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BD121SN1D

Impedance (@ 100MHz) (Ω)	Rated Current (mA)	Digi-Key Part No.	Cut Tape Pricing (¢)			Tape and Reel Qty.		Murata Part No.
			10	50	100	Qty.	Pricing	
120 ±25%	300	490-4000-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HB121SN1D
120 ±25%	350	490-5443-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BC121SN1D
120 ±25%	500	490-1005-1-NDΔ	.36	1.57	2.89	10,000	16.66/M	BLM15AG121SN1D
120 ±25%	680	490-5439-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX121SN1D
120 ±25%	1300	490-5203-1-NDΔ	.46	1.97	3.64	10,000	21.49/M	BLM15PD121SN1D
120 ±25%	1500	490-4004-1-NDΔ	1.21	5.21	9.63	10,000	56.14/M	BLM15EG121SN1D
220 ±25%	200	490-5190-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB221SN1D
220 ±25%	250	490-4001-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HB221SN1D
220 ±25%	300	490-5178-1-NDΔ	.36	1.57	2.89	10,000	16.64/M	BLM15AG221SN1D
220 ±25%	300	490-5193-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BD221SN1D
220 ±25%	300	490-5197-1-NDΔ	2.88	12.50	23.08	10,000	134.45/M	BLM15GG221SN1D
220 ±25%	580	490-5440-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX221SN1D
220 ±25%	700	490-4005-1-NDΔ	1.21	5.21	9.63	10,000	56.14/M	BLM15EG221SN1D
240 ±25%	250	490-5444-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BC241SN1D
470 ±25%	200	490-5194-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BD471SN1D
470 ±25%	200	490-5198-1-NDΔ	2.88	12.50	23.08	10,000	134.45/M	BLM15GG471SN1D
600 ±25%	200	490-1009-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BB601SN1D
600 ±25%	300	490-1006-1-NDΔ	.36	1.57	2.89	10,000	16.66/M	BLM15AG601SN1D
600 ±25%	300	490-3998-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HG601SN1D
600 ±25%	300	490-4002-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HD601SN1D
600 ±25%	420	490-5441-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX601SN1D
1000 ±25%	200	490-1010-1-NDΔ	.39	1.69	3.12	10,000	18.02/M	BLM15BD102SN1D
1000 ±25%	200	490-1007-1-NDΔ	.36	1.57	2.89	10,000	16.64/M	BLM15AG102SN1D
1000 ±25%	250	490-3999-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HG102SN1D
1000 ±25%	250	490-4003-1-NDΔ	.98	4.25	7.84	10,000	45.74/M	BLM15HD102SN1D
1000 ±25%	350	490-5442-1-NDΔ	.43	1.85	3.41	10,000	20.10/M	BLM15AX102SN1D
1800 ±25%	100	490-5195-1-NDΔ	.49	2.11	3.89	10,000	22.87/M	BLM15BD182SN1D
1800 ±25%	200	490-5196-1-NDΔ	1.20	5.18	9.56	10,000	56.14/M	BLM15HD182SN1D
<b>BLM18 Series — 0603 Case Size</b>								
5 ±25%	500	490-5204-1-ND§	.39	1.69	3.12	4,000	18.02/M	BLM18BA050SN1D
5 ±25%	700	490-5206-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BB050SN1D
10 ±25%	500	490-5205-1-ND§	.39	1.69	3.12	4,000	18.02/M	BLM18BA100SN1D
10 ±25%	700	490-5207-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BB100SN1D
22 ±25%	500	490-1016-1-ND	.39	1.69	3.12	4,000	18.02/M	BLM18BA220SN1D
22 ±25%	600	490-5246-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BB220SN1D
26 ±25%	6000	490-5252-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18KG260TN1D
26 ±25%	6000	490-3995-1-ND§	.61	2.65	4.89	10,000	22.87/M	BLM18SG260TN1D
30 (Typ.)	1000	490-1035-1-ND§	.36	1.55	2.87	4,000	16.74/M	BLM18PG300SN1D
30 ±25%	5000	490-5447-1-ND§	.37	1.62	2.99	4,000	17.47/M	BLM18KG300TN1D
33 ±25%	3000	490-5220-1-ND§	.36	1.55	2.87	4,000	16.64/M	BLM18PG330SN1D
47 ±25%	300	490-1017-1-ND§	.39	1.69	3.12	4,000	18.02/M	BLM18BA470SN1D
47 ±25%	500	490-5211-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BD470SN1D
47 ±25%	550	490-5208-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BB470SN1D
60 (Typ.)	500	490-1036-1-ND§	.36	1.55	2.87	4,000	16.74/M	BLM18PG600SN1D
60 ±25%	550	490-5247-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18BB600SN1D
70 ±25%	3500	490-5253-1-ND§	.37	1.62	2.99	4,000	17.33/M	BLM18KG700TN1D

† For Tape and Reel part number, change 1-ND to 2-ND.

(Continued)

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information