



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

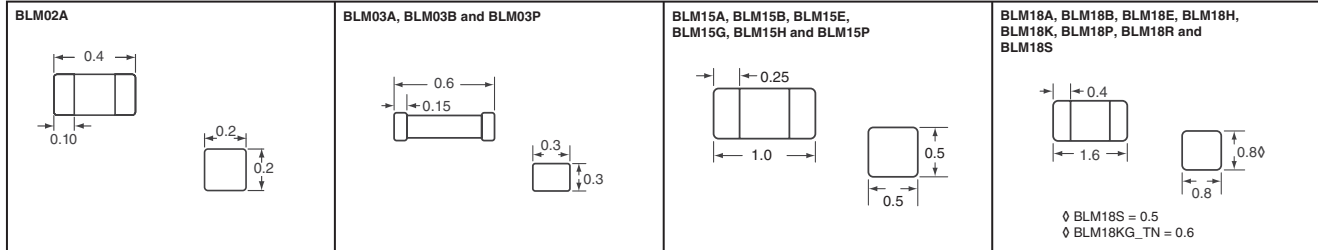
BLM18K Series: Can be used in high current circuits due to its low DC resistance.

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 | |
| BLM02 Series — 01005 Case Size | | | | | | | | |
| 10 (Typ.) | 500 | 490-5160-1-ND†† | 1.89 | 8.18 | 15.11 | 20,000 | 88.09/M | BLM02AG100SN1D |
| 70 ±25% | 250 | 490-5161-1-ND†† | 1.89 | 8.18 | 15.11 | 20,000 | 88.09/M | BLM02AG700SN1D |
| 120 ±25% | 200 | 490-5162-1-ND†† | 1.89 | 8.18 | 15.11 | 20,000 | 88.09/M | BLM02AG121SN1D |
| BLM03 Series — 0201 Case Size | | | | | | | | |
| 10 ±25% | 300 | 490-5166-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BB100SN1D |
| 10 (Typ.) | 500 | 490-2555-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG100SN1D |
| 22 ±25% | 200 | 490-5167-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BB220SN1D |
| 22 ±25% | 900 | 490-5174-1-ND†† | .75 | 3.27 | 6.03 | 15,000 | 35.24/M | BLM03PG220SN1D |
| 33 ±25% | 750 | 490-5175-1-ND†† | .75 | 3.27 | 6.03 | 15,000 | 35.24/M | BLM03PG330SN1D |
| 47 ±25% | 200 | 490-5168-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BB470SN1D |
| 70 (Typ.) | 200 | 490-2556-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG700SN1D |
| 75 ±25% | 200 | 490-5169-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BB750SN1D |
| 75 ±25% | 300 | 490-5171-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BD750SN1D |
| 80 ±25% | 200 | 490-5163-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG800SN1D |
| 120 ±25% | 100 | 490-5170-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BB121SN1D |
| 120 ±25% | 200 | 490-2557-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG121SN1D |
| 120 ±25% | 250 | 490-5172-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BD121SN1D |
| 240 ±25% | 200 | 490-2558-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG241SN1D |
| 240 ±25% | 200 | 490-5173-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BD241SN1D |
| 470 ±25% | 215 | 490-5543-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BD471SN1D |
| 600 ±25% | 100 | 490-5164-1-ND†† | .70 | 3.04 | 5.62 | 15,000 | 32.84/M | BLM03AG601SN1D |
| 600 ±25% | 200 | 490-5544-1-ND†† | .71 | 3.10 | 5.72 | 15,000 | 33.64/M | BLM03BD601SN1D |
| 1000 ±25% | 100 | 490-5165-1-ND†† | .79 | 3.44 | 6.34 | 15,000 | 36.84/M | BLM03AG102SN1D |
| BLM15 Series — 0402 Case Size | | | | | | | | |
| 5 ±25% | 300 | 490-5179-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA050SN1D |
| 5 ±25% | 500 | 490-5185-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB050SN1D |
| 10 ±25% | 300 | 490-5180-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA100SN1D |
| 10 ±25% | 300 | 490-5186-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB100SN1D |
| 10 (Typ.) | 1000 | 490-5176-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.22/M | BLM15AG100SN1D |
| 10 (Typ.) | 1740 | 490-5437-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX100SN1D |
| 22 ±25% | 300 | 490-5181-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA220SN1D |
| 22 ±25% | 300 | 490-5187-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB220SN1D |
| 30 ±25% | 2200 | 490-5200-1-NDΔ | .53 | 2.27 | 4.20 | 10,000 | 24.83/M | BLM15PD300SN1D |
| 33 ±25% | 300 | 490-5182-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA330SN1D |
| 47 ±25% | 200 | 490-5183-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA470SN1D |
| 47 ±25% | 300 | 490-5188-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB470SN1D |
| 60 ±25% | 1700 | 490-5201-1-NDΔ | .53 | 2.27 | 4.20 | 10,000 | 24.83/M | BLM15PD600SN1D |
| 70 (Typ.) | 500 | 490-5177-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.22/M | BLM15AG700SN1D |
| 70 ±25% | 780 | 490-5438-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX700SN1D |
| 75 ±25% | 200 | 490-5184-1-NDΔ | .50 | 2.15 | 3.96 | 10,000 | 23.23/M | BLM15BA750SN1D |
| 75 ±25% | 200 | 490-5199-1-NDΔ | 3.33 | 14.45 | 26.67 | 10,000 | 155.36/M | BLM15GA750SN1D |
| 75 ±25% | 300 | 490-5189-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB750SN1D |
| 75 ±25% | 300 | 490-5191-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BD750SN1D |
| 80 ±25% | 1500 | 490-5202-1-NDΔ | .53 | 2.27 | 4.20 | 10,000 | 24.83/M | BLM15PD800SN1D |
| 120 ±25% | 300 | 490-1008-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 21.03/M | BLM15BB121SN1D |
| 120 ±25% | 300 | 490-5192-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/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 | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HB121SN1D |
| 120 ±25% | 350 | 490-5443-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BC121SN1D |
| 120 ±25% | 500 | 490-1005-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.48/M | BLM15AG121SN1D |
| 120 ±25% | 680 | 490-5439-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX121SN1D |
| 120 ±25% | 1300 | 490-5203-1-NDΔ | .53 | 2.27 | 4.20 | 10,000 | 24.83/M | BLM15PD121SN1D |
| 120 ±25% | 1500 | 490-4004-1-NDΔ | 1.39 | 6.02 | 11.12 | 10,000 | 64.87/M | BLM15EG121SN1D |
| 220 ±25% | 200 | 490-5190-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BB221SN1D |
| 220 ±25% | 250 | 490-4001-1-NDΔ | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HB221SN1D |
| 220 ±25% | 300 | 490-5178-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.22/M | BLM15AG221SN1D |
| 220 ±25% | 300 | 490-5193-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BD221SN1D |
| 220 ±25% | 300 | 490-5197-1-NDΔ | 3.33 | 14.45 | 26.67 | 10,000 | 155.36/M | BLM15GG221SN1D |
| 220 ±25% | 580 | 490-5440-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX221SN1D |
| 220 ±25% | 700 | 490-4005-1-NDΔ | 1.39 | 6.02 | 11.12 | 10,000 | 64.87/M | BLM15EG221SN1D |
| 240 ±25% | 250 | 490-5444-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BC241SN1D |
| 470 ±25% | 200 | 490-5194-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 20.83/M | BLM15BD471SN1D |
| 470 ±25% | 200 | 490-5198-1-NDΔ | 3.33 | 14.45 | 26.67 | 10,000 | 155.36/M | BLM15GG471SN1D |
| 600 ±25% | 200 | 490-1009-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 21.03/M | BLM15BB601SN1D |
| 600 ±25% | 300 | 490-1006-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.48/M | BLM15AG601SN1D |
| 600 ±25% | 300 | 490-3998-1-NDΔ | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HG601SN1D |
| 600 ±25% | 300 | 490-4002-1-NDΔ | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HD601SN1D |
| 600 ±25% | 420 | 490-5441-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX601SN1D |
| 1000 ±25% | 200 | 490-1010-1-NDΔ | .45 | 1.95 | 3.60 | 10,000 | 21.03/M | BLM15BD102SN1D |
| 1000 ±25% | 200 | 490-1007-1-NDΔ | .42 | 1.81 | 3.34 | 10,000 | 19.22/M | BLM15AG102SN1D |
| 1000 ±25% | 250 | 490-3999-1-NDΔ | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HG102SN1D |
| 1000 ±25% | 250 | 490-4003-1-NDΔ | 1.13 | 4.91 | 9.06 | 10,000 | 52.86/M | BLM15HD102SN1D |
| 1000 ±25% | 350 | 490-5442-1-NDΔ | .50 | 2.14 | 3.94 | 10,000 | 23.23/M | BLM15AX102SN1D |
| 1800 ±25% | 100 | 490-5195-1-NDΔ | .56 | 2.43 | 4.49 | 10,000 | 26.43/M | BLM15BD182SN1D |
| 1800 ±25% | 200 | 490-5196-1-NDΔ | 1.39 | 5.99 | 11.05 | 10,000 | 64.87/M | BLM15HD182SN1D |
| BLM18 Series — 0603 Case Size | | | | | | | | |
| 5 ±25% | 500 | 490-5204-1-ND§ | .45 | 1.95 | 3.60 | 4,000 | 20.82/M | BLM18BA050SN1D |
| 5 ±25% | 700 | 490-5206-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18BB050SN1D |
| 10 ±25% | 500 | 490-5205-1-ND§ | .45 | 1.95 | 3.60 | 4,000 | 20.82/M | BLM18BA100SN1D |
| 10 ±25% | 700 | 490-5207-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 21.02/M | BLM18BB100SN1D |
| 22 ±25% | 500 | 490-1016-1-ND | .45 | 1.95 | 3.60 | 4,000 | 20.02/M | BLM18BA220SN1D |
| 22 ±25% | 600 | 490-5246-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18BB220SN1D |
| 26 ±25% | 6000 | 490-5252-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18KG260TN1D |
| 26 ±25% | 6000 | 490-3995-1-ND§ | .70 | 3.06 | 5.65 | 10,000 | 26.43/M | BLM18SG260TN1D |
| 30 (Typ.) | 1000 | 490-1035-1-ND§ | .42 | 1.79 | 3.32 | 4,000 | 19.34/M | BLM18PG300SN1D |
| 30 ±25% | 5000 | 490-5447-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.18/M | BLM18KG300TN1D |
| 33 ±25% | 3000 | 490-5220-1-ND§ | .42 | 1.79 | 3.32 | 4,000 | 19.22/M | BLM18PG330SN1D |
| 47 ±25% | 300 | 490-1017-1-ND§ | .45 | 1.95 | 3.60 | 4,000 | 21.02/M | BLM18BB470SN1D |
| 47 ±25% | 500 | 490-5211-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18BA470SN1D |
| 47 ±25% | 550 | 490-5208-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18BB470SN1D |
| 60 (Typ.) | 500 | 490-1036-1-ND§ | .42 | 1.79 | 3.32 | 4,000 | 19.34/M | BLM18PG600SN1D |
| 60 ±25% | 550 | 490-5247-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18BB600SN1D |
| 70 ±25% | 3500 | 490-5253-1-ND§ | .43 | 1.87 | 3.46 | 4,000 | 20.02/M | BLM18KG700TN1D |

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

(Continued)