EMI Filter Selection by Circuits and Noise Frequency

●Chip Ferrite Bead / Chip EMIFIL®

Noise Frequency?

Circuit Type?

Noise Frequency: Under 1GHz

Inductor Type (Suppression Effect: Normal)

Power Line

- **BLM02AX** p24 — 01005(0402)/Imp.10-120Ω
- **BLM03AX** p30 — 0201(0603)/0.2-1A/Imp.10-1000Ω
- **BLM03PG** p27 — 0201(0603)/0.75-0.9A/Imp.22-33Ω
- Low DC Resistance / High Current Type
- **BLM03PX** p28 — 0201(0603)/1-1.8A/Imp.22-80Ω
- **BLM15AX** p40 — 0402(1005)/0.35-1.74A/Imp.10-1000Ω
- **BLM15PX** p36 — 0402(1005)/0.9-3A/Imp.33-600Ω
- **BLM15PG/PD** p38 — 0402(1005)/1-2.2A/Imp.10-120Ω
- **BLM18P** p50 — 0603(1608)/0.5-3A/Imp.30-470Ω
- **BLM21P** p66 — 0805(2012)/1.5-6A/Imp.22-330Ω
- **BLM31P** p75 — 1206(3216)/1.5-6A/Imp.33-600Ω
- **BLM41P** p77 — 1806(4516)/1.5-6A/Imp.60-1000Ω
- **BLE32P** p79 — 1210(3225)/10A/Imp.30Ω
- Low DC Resistance Type
- **BLM18K** p52 — 0603(1608)/1.3-6A/Imp.26-600Ω
- **BLM18S** p54 — 0603(1608)/1.5-6A/Imp.26-330Ω

General Signal Line Under 10MHz

- **BLM03AG** p32 — 0201(0603)/Imp.10-1000Ω
- **BLM15AG** p42 — 0402(1005)/Imp.10-1000Ω
- **BLM18A** p56 — 0603(1608)/Imp.120-1000Ω
- **BLM18T** p62 — 0603(1608)/Imp.120-1000Ω
- **BLM18R** p63 — 0603(1608)/Imp.120-1000Ω
- **BLM21A** p68 — 0805(2012)/Imp.120-1000Ω
- **BLM21R** p73 — 0805(2012)/Imp.120-1000Ω
- Array Type
- **BLA2AA** p80 — 0804(2010)/Imp.120-1000Ω
- **BLA31A** p83 — 1206(3216)/Imp.30-1000Ω

High Speed Signal Line Over 10MHz

- **BLM02BX** p26 — 01005(0402)/Imp.150Ω
- **BLM03B** p34 — 0201(0603)/Imp.10-600Ω
- **BLM15BX** p44 — 0402(1005)/0.25-0.6A/Imp.75-1800Ω
- **BLM15B** p46 — 0402(1005)/Imp.5-1800Ω
- **BLM18B** p58 — 0603(1608)/Imp.5-2500Ω
- **BLM21B** p70 — 0805(2012)/Imp.5-2700Ω
- Array Type
- **BLA2AB** p80 — 0804(2010)/Imp.10-1000Ω
- **BLA31B** p83 — 1206(3216)/Imp.120-1000Ω

Capacitor Type (Suppression Effect: High)

Power Line

- **NFM15PC** p123 — 0402(1005)/Cap.0.047-4.3μF
- **NFM18PC** p126 — 0603(1608)/2-4A/Cap.0.1-2.2μF
- **NFM21PC** p129 — 0805(2012)/2-6A/Cap.0.1-4.7μF
- **NFM3DPC** p130 — 1205(3212)/2A/Cap.0.022μF
- **NFM31PC** p131 — 1206(3216)/6A/Cap.27μF
- **NFM31KC** p132 — 1206(3216)/6-10A/Cap.0.01-0.1μF
- **NFM41PC** p133 — 1806(4516)/2-6A/Cap.0.2-1.5μF
- T Circuit Filter Feed Through Type
- **NFE31PT** p121 — 1206(3216)/6A/Cap.22-2200pF
- **NFE61PT** p122 — 2706(6816)/2A/Cap.33-4700pF
- Block Type
- **BNX022/023** p221 — 10-15A

General Signal Line Under 10MHz

- **NFM15CC** p134 — 0402(1005)/Cap.2200-22000pF
- **NFM18CC** p135 — 0603(1608)/Cap.22-22000pF
- **NFM21CC** p136 — 0805(2012)/Cap.22-22000pF
- **NFM3DCC** p137 — 1205(3212)/Cap.22-22000pF
- **NFM41CC** p138 — 1806(4516)/Cap.22-22000pF
- Array Type
- **NFA31CC** p139 — 1206(3216)/Cap.22-22000pF
- T Circuit Filter Feed Through Type
- **NFE31PT** p121 — 1206(3216)/Cap.22-2200pF
- **NFE61PT** p122 — 2706(6816)/Cap.33-4700pF

High Speed Signal Line Over 10MHz

- LC Combined
- **NFL15ST** p140 — 0402(1005)/Cut off 150-500MHz
- **NFL18ST** p141 — 0603(1608)/Cut off 50-500MHz
- **NFL18SP** p143 — 0603(1608)/Cut off 150-500MHz
- **NFL21SP** p144 — 0805(2012)/Cut off 10-500MHz
- **NFW31SP** p150 — 1206(3216)/Cut off 10-500MHz
- RC Combined
- **NFR21GD** p152 — 0805(2012)/22-100Ω/Cap.10-100pF
- Array Type (RC/LC Combined)
- **NFA31GD** p153 — 1206(3216)/6.8-100Ω/Cap.10-100pF
- **NFA18SL/NFA18SD** p145 p147 — 0603(1608)/Cut off 50-480MHz
- **NFA21SL** p148 — 0805(2012)/Cut off 50-330MHz

Noise Frequency: GHz Band (800MHz to 2.5GHz)

Inductor Type (Suppression Effect: Normal)

Power Line

- **BLM18HE** p92 — 0603(1608)/0.5-0.8A/Imp.600-1500Ω
- **BLM03E** p87 — 0201(0603)/0.4-0.6A/Imp.25-50Ω
- **BLM15E** p90 — 0402(1005)/0.7-1.5A/Imp.120-220Ω
- **BLM18E** p96 — 0603(1608)/0.5-2A/Imp.100-600Ω

General Signal Line Under 10MHz

- **BLM03HG** p85 — 0201(0603)/Imp.600-1200Ω
- **BLM15HG** p88 — 0402(1005)/Imp.600-1000Ω
- **BLM18HG** p92 — 0603(1608)/Imp.470-1000Ω
- **BLM18HK** p92 — 0603(1608)/Imp.330-1000Ω

High Speed Signal Line Over 10MHz

- **BLM03HD** p85 — 0201(0603)/Imp.330-1000Ω
- **BLM03HB** p85 — 0201(0603)/Imp.190Ω
- **BLM15HD** p88 — 0402(1005)/Imp.600-1800Ω
- **BLM15HB** p88 — 0402(1005)/Imp.120-220Ω
- **BLM18HD** p92 — 0603(1608)/Imp.470-1000Ω
- **BLM18HE** p92 — 0603(1608)/Imp.600-1500Ω
- **BLM18HB** p92 — 0603(1608)/Imp.120-330Ω

Capacitor Type (Suppression Effect: High)

Power Line

- **NFM18PS** p125 — 0603(1608)/2A/Cap.0.47-1.0μF
- **NFM21PS** p128 — 0805(2012)/4A/Cap.10μF

High Speed Signal Line Over 10MHz

- LC Combined
- **NFL18ST** p141 — 0603(1608)/Cut off 50-500MHz
- Array Type (LC Combined)
- **NFA18SL/NFA18SD** p145 p147 — 0603(1608)/Cut off 50-480MHz
- **NFA21SL** p148 — 0805(2012)/Cut off 50-330MHz

Noise Frequency: High-GHz Band (1GHz to 10GHz)

Inductor Type

General Signal Line Under 10MHz

- **BLM15GG** p91 — 0402(1005)/Imp.220-470Ω
- **BLM18G** p98 — 0603(1608)/Imp.470Ω

High Speed Signal Line Over 10MHz

- **BLM15GA** p91 — 0402(1005)/Imp.75Ω

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●Chip Common Mode Choke Coil

Circuit Type?

DC Power Line


DLW5AH p177
2014(5036)/0.2A/Imp.4000Ω


DLW5AT p179
2014(5036)/1-6A/Imp.50-2700Ω


DLW5BS p177
2020(5050)/0.5-5A/Imp.190-3000Ω


DLW5BT p179
2020(5050)/1.5-6A/Imp.100-1400Ω

High Current Type Automotive Available


PLT10HH p202
12.9mmx6.6mm
/6-18A/Imp.45-1000Ω

High Speed Differential Signal Line

High Speed Signal Line
(USB/LVDS/IEEE1394/mipi etc.)

DLM11S p185
0504(1210)/Imp.45-90Ω

DLP0QSN p186
025020(0605)/Imp.60Ω

DLP0NSC/SN p187
03025(0806)/Imp.28-120Ω


DLP11SN p189
0504(1210)/Imp.67-330Ω


DLP11RN p189
0504(1210)/Imp.45Ω


DLW21H p199
0805(2012)/Imp.67-180Ω


DLW21S_S/X p197
0805(2012)/Imp.67-500Ω


DLP31S p192
1206(3216)/Imp.120-550Ω


DLW31S p200
1206(3216)/Imp.90-2200Ω

Automotive Available


DLW43S p201
1812(4532)

Array Type

DLP1ND p193
05025(1506)/Imp.35-90Ω


DLP2ADN p194
0804(2010)/Imp.67-280Ω


DLP31D p196
1206(3216)/Imp.90-440Ω

Ultra High Speed Signal Line
(HDMI/DVI/Display Port etc.)

DLP0QSA p186
025020(0605)/Imp.7-35Ω

DLP0NSA p187
03025(0806)/Imp.7-15Ω

DLP11SA p189
0504(1210)/Imp.35-90Ω


DLP11RB p189
0504(1210)/Imp.15-40Ω


DLP11TB p189
0504(1210)/Imp.80Ω


DLW21S_HQ p197
0805(2012)/Imp.67-120Ω

Array Type


DLP2ADA p194
0804(2010)/Imp.35-90Ω

Audio Line

DLM11G p184
0504(1210)/Imp.600Ω


DLW5AT p179
2014(5036)/1-6A/Imp.50-2700Ω


DLW5BT p179
2020(5050)/1.5-6A/Imp.100-1400Ω

Guide of Digits in this Chart:

●for BLM03P

0201(0603)/0.75-0.9A/Imp.22-33Ω

- 0201(0603): Size (inch) / Size (mm)
- 0.75-0.9A: Rated Current
- Imp.22-33Ω: Impedance

●for BNX022/023

10-15A/Range1MHz-2GHz

- 10-15A: Rated Current
- Range1MHz-2GHz: Effective Frequency Range

●for NFR21GD

0805(2012)/22-100Ω/Cap.10-100pF

- 0805(2012): Size (inch) / Size (mm)
- 22-100Ω: Resistance
- Cap.10-100pF: Capacitance

●for NFA18S

0603(1608)/Cut off 50-480MHz

- 0603(1608): Size (inch) / Size (mm)
- Cut off 50-480MHz: Cut-off Frequency

●for DLW5BS

2020(5050)/0.5-5A/Imp.190-3000Ω

- 2020(5050): Size (inch) / Size (mm)
- 0.5-5A: Rated Current
- Imp.190-3000Ω: Impedance

BL□

Inductor Type

			Series	Size Code in inch (in mm)	Impedance (Ω) at 100MHz	Effective Frequency Range (Applicable Frequency Ranges are only for reference.)
					10 100 1000	10kHz 100kHz 1MHz 10MHz 100MHz 1GHz 10GHz
For General Band Noise	Universal Type [Power Lines / Signal Lines]		BLM02AX p24	01005 (0402)	10 70 120	
			BLM03AX p30	0201 (0603)	10 80 120 240 600 1000	
			BLM15AX p40	0402 (1005)	10 30 70 120 220 600 1000	
	Signal Lines Type	For General Signal Lines	BLM03AG p32	0201 (0603)	10 80 70 120 240 600 1000	
			BLM15AG p42	0402 (1005)	10 70 120 220 600 1000	
			BLM18A p56	0603 (1608)	120 150 220 330 470 600 1000	
			BLM21A p68	0805 (2012)	120 150 220 330 470 600 1000	
			BLM18T p62	0603 (1608)	120 220 600 1000	
			BLA2AA p80 (4 circuits array)	0804 (2010)	120 220 600 1000	
			BLA31A p83 (4 circuits array)	1206 (3216)	30 60 120 220 600 1000	
		For High Speed Signal Lines	BLM02BX p26	01005 (0402)	150	
			BLM03B p34	0201 (0603)	10 22 33 47 56 75 80 120 240 470 600	
			BLM15B p44	0402 (1005)	5 10 22 33 47 75 120 220 240 470 600 1000 1800	
			BLM18B p58	0603 (1608)	5 10 22 47 60 75 120 140 150 220 330 420 470 600 1000 1500 1800 2200 2500	
			BLM21B p70	0805 (2012)	5 60 75 120 150 200 220 330 420 470 600 750 1000 1500 1800 2200 2250 2700	
			BLA2AB p80 (4 circuits array)	0804 (2010)	10 22 47 75 120 220 600 470 1000	
			BLA31B p83 (4 circuits array)	1206 (3216)	120 220 600 470 1000	
		For Digital Interface Lines	BLM18R p63	0603 (1608)	120 220 600 470 1000	
			BLM21R p73	0805 (2012)	120 220 600 470 1000	
	Power Lines Type		BLM03PX* p28	0201 (0603)	22 (1.8A) 33 (1.5A) 80 (1A)	
			BLM03PG p27	0201 (0603)	22 (0.9A) 33 (0.75A)	
			BLM15P* p36	0402 (1005)	10 (1A) 30 (2.2A) 33 (3A) 60 (1.7A/2.5A) 80 (1.5A/2.3A) 120 (1.3A/2A) 180 (1.5A) 330 (1.2A) 220 (1.4A) 600 (0.9A) 470 (1A)	
			BLM18P* p50	0603 (1608)	30 (1A) 33 (3A) 60 (0.5A) 120 (2A) 180 (1.5A) 220 (1.4A) 330 (1.2A) 470 (1A)	
			BLM21P* p66	0805 (2012)	22 (6A) 30 (4A) 60 (3.5A) 120 (3A) 220 (2A) 330 (1.5A)	
			BLM31P* p75	1206 (3216)	33 (6A) 50 (3.5A) 120 (3.5A) 390 (2A) 600 (1.5A)	
			BLM41P* p77	1806 (4516)	60 (6A) 75 (3.5A) 180 (3.5A) 470 (2A) 1000 (1.5A)	
			BLM18K* p52 (Low DC Resistance Type)	0603 (1608)	26 (6A) 30 (5A) 70 (3.5A) 100 (3A) 120 (3A) 220 (2.2A) 330 (1.7A) 470 (1.5A) 600 (1.3A)	
			BLM18S* p54 (Low DC Resistance Type)	0603 (1608)	26 (6A) 70 (4A) 120 (3A) 220 (2.5A) 330 (1.5A)	
			BLE32P p79	1210 (3225)	30	
For GHz Band Noise	Universal Type [Power Lines / Signal Lines]		BLM03E* p87	0201 (0603)	25 (0.6A) 50 (0.4A)	
			BLM15E* p90	0402 (1005)	120 (1.5A) 220 (0.7A)	
			BLM18EG* p96	0603 (1608)	100 (2A) 120 (2A) 220 (2A/1A) 330 (0.5A) 390 (0.5A) 470 (0.5A) 600 (0.5A)	
			BLM18HE* p92	0603 (1608)	600 (0.8A) 1000 (0.6A) 1500 (0.5A)	
	Signal Lines Type		BLM03HG p85	0201 (0603)	600 1000 1200	
			BLM03HD p85	0201 (0603)	330 470 600 1000	
			BLM03HB p85	0201 (0603)	190	
			BLM15HG p88	0402 (1005)	600 1000	
			BLM15HD p88	0402 (1005)	600 1000 1800	
			BLM15HB p88	0402 (1005)	120 220	
			BLM18HG p92	0603 (1608)	470 600 1000	
			BLM18HD p92	0603 (1608)	470 600 1000	
			BLM18HB p92	0603 (1608)	120 220 330	
			BLM18HK p92	0603 (1608)	330 470 600 1000	
For High-GHz Band Noise	Signal Lines Type		BLM15GG p91	0402 (1005)	220 470	
			BLM15GA p91	0402 (1005)	75	
			BLM18G p98	0603 (1608)	470	

* The derating of rated current is required for some items according to the operating temperature on each product page.

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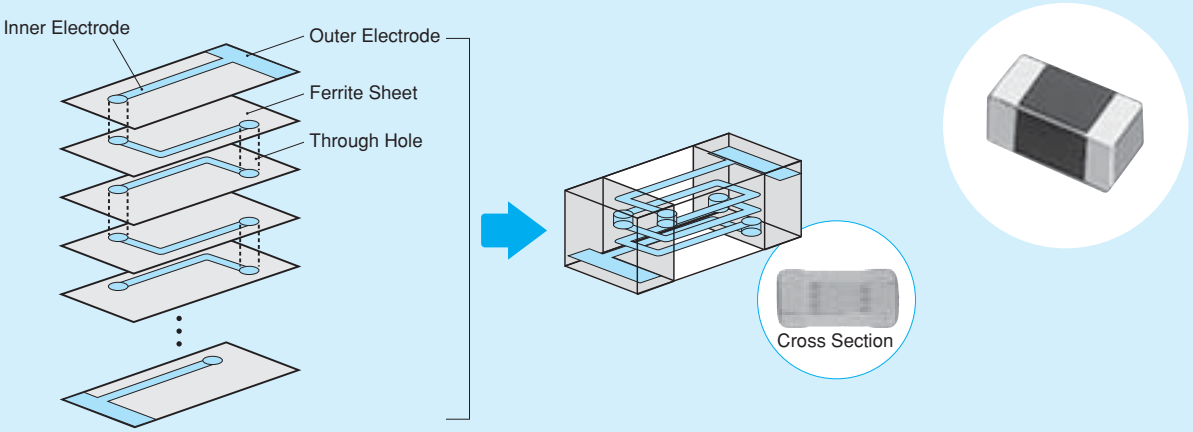
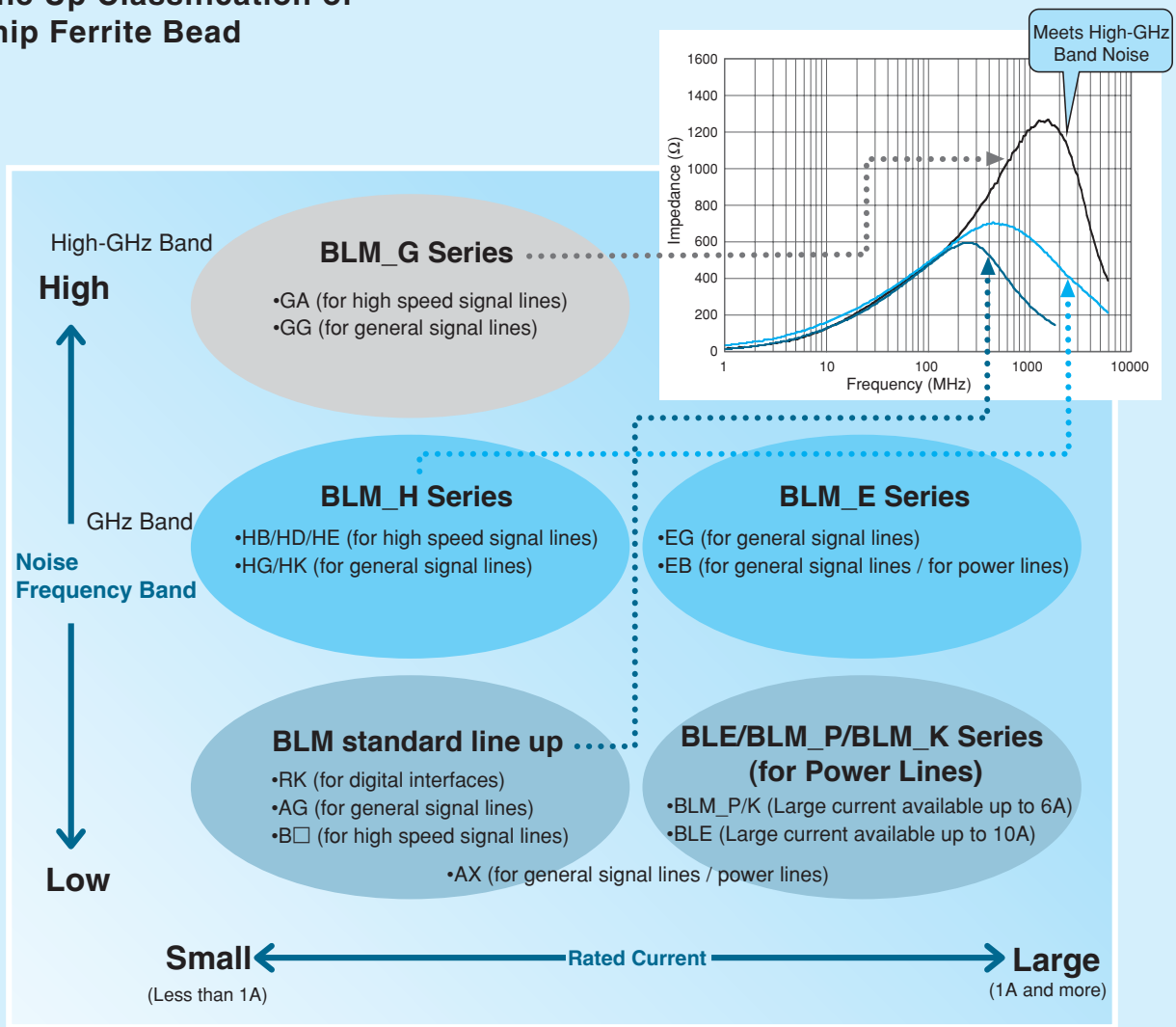
●Example of Chip Ferrite Bead BLM Series Structure



●Line Up Classification of Chip Ferrite Bead



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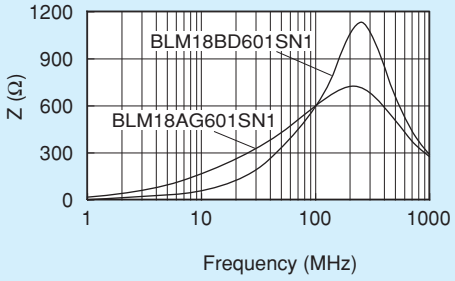
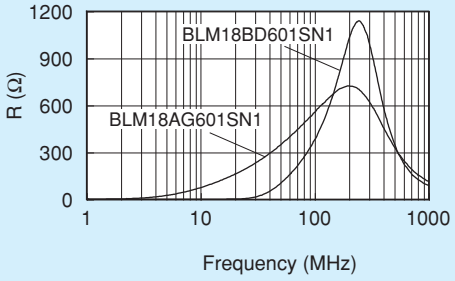
●Difference between BLM A type and B type (HG type vs HD/HB/HE type)

A type: Impedance curve rises from low frequency range. Suppresses noise in a wide frequency range.
B type: Impedance curve rises sharply. Less damage to signal waveforms.

■Comparison of Impedance Curve

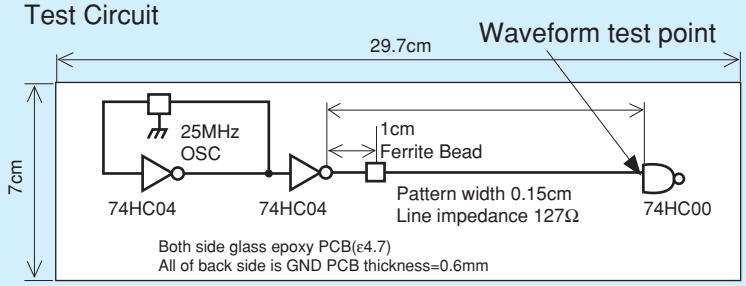


■Comparison of Resistance Element

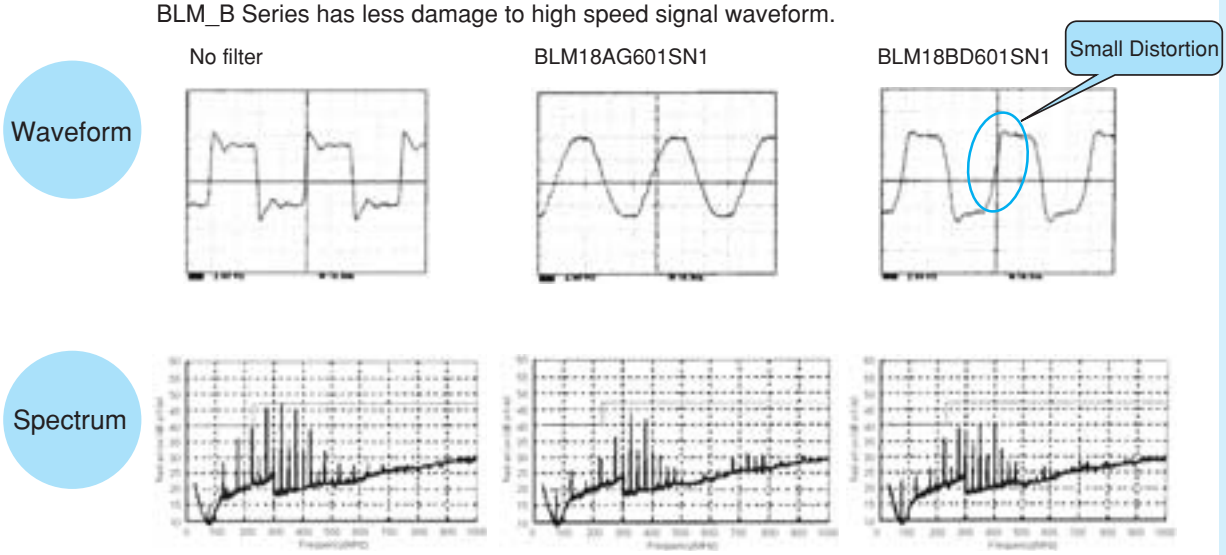


■Comparison of Test Effect (25MHz)

Test Circuit



BLM_B Series has less damage to high speed signal waveform.



BL□ Chip Ferrite Bead Part Numbering

(Part Number) BL M 18 AG 102 S N 1 D
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽ ❾

❶Product ID

Product ID	
BL	Chip Ferrite Beads

❷Type

Code	Type
A	Array Type
E	DC Bias Characteristics Improved Type
M	Ferrite Bead Single Type

❸Dimensions (L×W)

Code	Dimensions (L×W)	EIA
02	0.4×0.2mm	01005
03	0.6×0.3mm	0201
15	1.0×0.5mm	0402
18	1.6×0.8mm	0603
2A	2.0×1.0mm	0804
21	2.0×1.25mm	0805
31	3.2×1.6mm	1206
32	3.2×2.5mm	1210
41	4.5×1.6mm	1806

❹Characteristics/Applications

Code *1	Characteristics/Applications	Series
AG	For General Use	BLM03/15/18/21, BLA2A/31
AX		BLM02/03/15
TG		BLM18
BA	For High-speed Signal Lines	BLM15/18
BB		BLM03/15/18/21, BLA2A
BC		BLM03/15
BD		BLM03/15/18/21, BLA2A/31
BX		BLM02/15
PD	For Power Lines	BLM15
PG		BLM03/15/18/21/31/41
PN		BLE32
PX		BLM03/15
KG	For Power Lines (Low DC Resistance Type)	BLM18
SG		
RK	For Digital Interface	BLM18/21
HG	For GHz Band General Use	BLM03/15/18
EB	For GHz Band High-speed Signal Lines (Low Direct Current Type)	BLM03
EG	For GHz Band General Use (Low DC Resistance Type)	BLM15/18
HB	For GHz Band High-speed Signal Lines	BLM03/15/18
HD		BLM03/15/18
HE		BLM18
HK	For GHz Band Digital Interface	BLM18
GA	For High-GHz Band High-speed Signal Lines	BLM15
GG	For High-GHz Band General Use	BLM15/18

*1 Frequency characteristics vary with each code.

❺Impedance
Expressed by three figures. The unit is in ohm (Ω) at 100MHz. The first and second figures are significant digits, and the third figure expresses the number of zeros that follow the two figures.

❻Electrode
Expressed by a letter.

Ex.)

Code	Electrode
S/T	Sn Plating
A	Au Plating

❼Category

Code	Category
N	Standard Type

❽Number of Circuits

Code	Number of Circuits
1	1 Circuit
4	4 Circuits

Continued on the following page.

❾Packaging

Code	Packaging	Series
K	Embossed Taping (ø330mm Reel)	**BLE, BLM21 *1/31/41**
L	Embossed Taping (ø180mm Reel)	
B	Bulk	All Series
J	Paper Taping (ø330mm Reel)	**BLM03/15/18 *3/21 *2, BLA2A/31**
D	Paper Taping (ø180mm Reel)	**BLM02/03/15/18/21 *2, BLA2A/31**

*1 BLM21BD222SN1/BLM21BD272SN1 only.
*2 Except for BLM21BD222SN1/BLM21BD272SN1
*3 Except for BLM18T

Size Code in inch (in mm)	Thickness (mm)	Type		Part Number	Impedance at 100MHz/20°C	Impedance at 1GHz/20°C	Rated Current	New	Kit	≥1A ≥3A ≥10A	GHz Hi-GHz	Flow	ReFlow
01005 (0402)	0.2	Universal Type [Power lines/Signal lines] p24		BLM02AX100SN1	10ohm±5ohm	-	750mA		Kit				ReFlow
	0.2			BLM02AX700SN1	70ohm±25%	-	300mA		Kit				ReFlow
	0.2			BLM02AX121SN1	120ohm±25%	-	250mA		Kit				ReFlow
	0.2	For High Speed Signal Lines p26		BLM02BX151SN1	150ohm±25%	-	200mA	New					ReFlow
0201 (0603)	0.3	For General Signal Lines p32		BLM03AG100SN1	10ohm(Typ.)	-	500mA		Kit				ReFlow
	0.3			BLM03AG700SN1	70ohm(Typ.)	-	200mA		Kit				ReFlow
	0.3			BLM03AG800SN1	80ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03AG121SN1	120ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03AG241SN1	240ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03AG601SN1	600ohm±25%	-	100mA		Kit				ReFlow
	0.3			BLM03AG102SN1	1000ohm±25%	-	100mA		Kit				ReFlow
	0.3	Universal Type [Power lines/Signal lines] p30		BLM03AX100SN1	10ohm(Typ.)	-	1000mA		Kit	≥1A			ReFlow
	0.3			BLM03AX800SN1	80ohm±25%	-	500mA		Kit				ReFlow
	0.3			BLM03AX121SN1	120ohm±25%	-	450mA		Kit				ReFlow
	0.3			BLM03AX241SN1	240ohm±25%	-	350mA		Kit				ReFlow
	0.3			BLM03AX601SN1	600ohm±25%	-	250mA		Kit				ReFlow
	0.3			BLM03AX102SN1	1000ohm±25%	-	200mA		Kit				ReFlow
	0.3	For High Speed Signal Lines (Sharp Impedance Curve) p34		BLM03BD750SN1	75ohm±25%	-	300mA		Kit				ReFlow
	0.3			BLM03BD121SN1	120ohm±25%	-	250mA		Kit				ReFlow
	0.3			BLM03BD241SN1	240ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03BD471SN1	470ohm±25%	-	215mA		Kit				ReFlow
	0.3			BLM03BD601SN1	600ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03BB100SN1	10ohm±25%	-	300mA		Kit				ReFlow
	0.3			BLM03BB220SN1	22ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03BB470SN1	47ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03BB750SN1	75ohm±25%	-	200mA		Kit				ReFlow
	0.3			BLM03BB121SN1	120ohm±25%	-	100mA		Kit				ReFlow
	0.3			BLM03BC330SN1	33ohm±25%	-	150mA		Kit				ReFlow
	0.3			BLM03BC560SN1	56ohm±25%	-	100mA		Kit				ReFlow
	0.3			BLM03BC800SN1	80ohm±25%	-	100mA		Kit				ReFlow
	0.3	For Power Lines p27 p28		BLM03PG220SN1	22ohm±25%	-	900mA		Kit				ReFlow
	0.3			BLM03PG330SN1	33ohm±25%	-	750mA		Kit				ReFlow
	0.3			BLM03PX220SN1	22ohm±25%	-	1800mA		Kit	≥1A			ReFlow
	0.3			BLM03PX330SN1	33ohm±25%	-	1500mA		Kit	≥1A			ReFlow
	0.3			BLM03PX800SN1	80ohm±25%	-	1000mA		Kit	≥1A			ReFlow
	0.3	For GHz Band Noise	For General Signal Lines p85	BLM03HG601SN1	600ohm±25%	1000ohm±40%	150mA		Kit		GHz		ReFlow
	0.3			BLM03HG102SN1	1000ohm±25%	1800ohm±40%	125mA		Kit		GHz		ReFlow
	0.3			BLM03HG122SN1	1200ohm±25%	2000ohm±40%	100mA	New			GHz		ReFlow
	0.3		Universal Type [Power lines/Signal lines] p87	BLM03EB250SN1	25ohm±25%	105ohm±40%	600mA		Kit		GHz		ReFlow
	0.3			BLM03EB500SN1	50ohm±25%	255ohm±40%	400mA		Kit		GHz		ReFlow
	0.3		For High Speed Signal Lines p85	BLM03HD331SN1	330ohm±25%	750ohm±40%	200mA		Kit		GHz		ReFlow
	0.3			BLM03HD471SN1	470ohm±25%	1000ohm±40%	175mA		Kit		GHz		ReFlow
	0.3			BLM03HD601SN1	600ohm±25%	1500ohm±40%	150mA		Kit		GHz		ReFlow
	0.3			BLM03HD102SN1	1000ohm±25%	2300ohm±40%	120mA		Kit		GHz		ReFlow
	0.3			BLM03HB191SN1	190ohm±25%	1150ohm±40%	150mA		Kit		GHz		ReFlow
0402 (1005)	0.5	For General Signal Lines p42		BLM15AG100SN1	10ohm(Typ.)	-	1000mA		Kit	≥1A			ReFlow
	0.5			BLM15AG700SN1	70ohm(Typ.)	-	600mA		Kit				ReFlow
	0.5			BLM15AG121SN1	120ohm±25%	-	550mA		Kit				ReFlow
	0.5			BLM15AG221SN1	220ohm±25%	-	450mA		Kit				ReFlow
	0.5			BLM15AG601SN1	600ohm±25%	-	300mA		Kit				ReFlow
	0.5			BLM15AG102SN1	1000ohm±25%	-	300mA		Kit				ReFlow
	0.5	Universal Type [Power lines/Signal lines] p40		BLM15AX100SN1	10ohm±5ohm	-	1740mA		Kit	≥1A			ReFlow
	0.5			BLM15AX300SN1	30ohm±25%	-	1100mA		Kit	≥1A			ReFlow
	0.5			BLM15AX700SN1	70ohm±25%	-	780mA		Kit				ReFlow
	0.5			BLM15AX121SN1	120ohm±25%	-	700mA		Kit				ReFlow
	0.5			BLM15AX221SN1	220ohm±25%	-	600mA		Kit				ReFlow
	0.5			BLM15AX601SN1	600ohm±25%	-	500mA		Kit				ReFlow
	0.5			BLM15AX102SN1	1000ohm±25%	-	350mA		Kit				ReFlow

Continued on the following page.

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Size Code in inch (in mm)	Thickness (mm)	Type		Part Number	Impedance at 100MHz/20°C	Impedance at 1GHz/20°C	Rated Current	New / Kit / ≥1A / ≥3A / ≥10A / GHz / Hi-GHz / Flow / ReFlow
0402 (1005)	0.5	For High Speed Signal Lines (Sharp Impedance Curve)	p44	BLM15BX750SN1	75ohm±25%	-	600mA	Kit ReFlow
	0.5			BLM15BX121SN1	120ohm±25%	-	600mA	Kit ReFlow
	0.5			BLM15BX221SN1	220ohm±25%	-	450mA	Kit ReFlow
	0.5			BLM15BX471SN1	470ohm±25%	-	350mA	Kit ReFlow
	0.5			BLM15BX601SN1	600ohm±25%	-	350mA	Kit ReFlow
	0.5			BLM15BX102SN1	1000ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BX182SN1	1800ohm±25%	-	250mA	Kit ReFlow
	0.5		p46	BLM15BD750SN1	75ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BD121SN1	120ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BD221SN1	220ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BD471SN1	470ohm±25%	-	200mA	Kit ReFlow
	0.5			BLM15BD601SN1	600ohm±25%	-	200mA	Kit ReFlow
	0.5			BLM15BD102SN1	1000ohm±25%	-	200mA	Kit ReFlow
	0.5			BLM15BD182SN1	1800ohm±25%	-	100mA	Kit ReFlow
	0.5			BLM15BB050SN1	5ohm±25%	-	500mA	Kit ReFlow
	0.5			BLM15BB100SN1	10ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BB220SN1	22ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BB470SN1	47ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BB750SN1	75ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BB121SN1	120ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BB221SN1	220ohm±25%	-	200mA	Kit ReFlow
	0.5			BLM15BC121SN1	120ohm±25%	-	350mA	Kit ReFlow
	0.5			BLM15BC241SN1	240ohm±25%	-	250mA	Kit ReFlow
	0.5			BLM15BA050SN1	5ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BA100SN1	10ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BA220SN1	22ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BA330SN1	33ohm±25%	-	300mA	Kit ReFlow
	0.5			BLM15BA470SN1	47ohm±25%	-	200mA	Kit ReFlow
	0.5			BLM15BA750SN1	75ohm±25%	-	200mA	Kit ReFlow
	0.5	For Power Lines	p36	BLM15PX330SN1	33ohm±25%	-	3000mA	Kit ≥3A ReFlow
	0.5			BLM15PX600SN1	60ohm±25%	-	2500mA	Kit ≥1A ReFlow
	0.5			BLM15PX800SN1	80ohm±25%	-	2300mA	Kit ≥1A ReFlow
	0.5			BLM15PX121SN1	120ohm±25%	-	2000mA	Kit ≥1A ReFlow
	0.5			BLM15PX181SN1	180ohm±25%	-	1500mA	Kit ≥1A ReFlow
	0.5			BLM15PX221SN1	220ohm±25%	-	1400mA	Kit ≥1A ReFlow
	0.5			BLM15PX331SN1	330ohm±25%	-	1200mA	Kit ≥1A ReFlow
	0.5			BLM15PX471SN1	470ohm±25%	-	1000mA	Kit ≥1A ReFlow
	0.5			BLM15PX601SN1	600ohm±25%	-	900mA	Kit ReFlow
	0.5		p38	BLM15PG100SN1	10ohm(Typ.)	-	1000mA	Kit ≥1A ReFlow
	0.5			BLM15PD300SN1	30ohm±25%	-	2200mA	Kit ≥1A ReFlow
	0.5			BLM15PD600SN1	60ohm±25%	-	1700mA	Kit ≥1A ReFlow
	0.5			BLM15PD800SN1	80ohm±25%	-	1500mA	Kit ≥1A ReFlow
	0.5			BLM15PD121SN1	120ohm±25%	-	1300mA	Kit ≥1A ReFlow
	0.5	For GHz Band Noise	p88 For General Signal Lines	BLM15HG601SN1	600ohm±25%	1000ohm±40%	300mA	Kit GHz ReFlow
	0.5			BLM15HG102SN1	1000ohm±25%	1400ohm±40%	250mA	Kit GHz ReFlow
	0.5		p88 For High Speed Signal Lines (Sharp Impedance Curve)	BLM15HD601SN1	600ohm±25%	1400ohm±40%	300mA	Kit GHz ReFlow
	0.5			BLM15HD102SN1	1000ohm±25%	2000ohm±40%	250mA	Kit GHz ReFlow
	0.5			BLM15HD182SN1	1800ohm±25%	2700ohm±40%	200mA	Kit GHz ReFlow
	0.5			BLM15HB121SN1	120ohm±25%	500ohm±40%	300mA	Kit GHz ReFlow
	0.5			BLM15HB221SN1	220ohm±25%	900ohm±40%	250mA	Kit GHz ReFlow
	0.5		Universal Type [Power Lines/Signal Lines] p90	BLM15EG121SN1	120ohm±25%	145ohm(Typ.)	1500mA	Kit ≥1A GHz ReFlow
	0.5			BLM15EG221SN1	220ohm±25%	270ohm(Typ.)	700mA	Kit GHz ReFlow
	0.5	For High-GHz Band Noise	p91 For General Signal Lines	BLM15GG221SN1	220ohm±25%	600ohm±40%	300mA	Kit Hi-GHz ReFlow
	0.5			BLM15GG471SN1	470ohm±25%	1200ohm±40%	200mA	Kit Hi-GHz ReFlow
	0.5		For High Speed Signal Lines p91	BLM15GA750SN1	75ohm±25%	1000ohm±40%	200mA	Kit Hi-GHz ReFlow

Continued on the following page.

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Size Code in inch (in mm)	Thickness (mm)	Type	Part Number	Impedance at 100MHz/20°C	Impedance at 1GHz/20°C	Rated Current	New	Kit	≥1A ≥3A ≥10A	GHz Hi-GHz	Flow	ReFlow
0603 (1608)	0.8	For General Signal Lines p56	BLM18AG121SN1	120ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG151SN1	150ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG221SN1	220ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG331SN1	330ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG471SN1	470ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG601SN1	600ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18AG102SN1	1000ohm±25%	-	400mA		Kit			Flow	ReFlow
	0.6	p62	BLM18TG121TN1	120ohm±25%	-	200mA					Flow	ReFlow
	0.6		BLM18TG221TN1	220ohm±25%	-	200mA					Flow	ReFlow
	0.6		BLM18TG601TN1	600ohm±25%	-	200mA					Flow	ReFlow
	0.6		BLM18TG102TN1	1000ohm±25%	-	100mA					Flow	ReFlow
	0.8	For High Speed Signal Lines (Sharp Impedance Curve) p58	BLM18BD470SN1	47ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18BD121SN1	120ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD151SN1	150ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD221SN1	220ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD331SN1	330ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD421SN1	420ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD471SN1	470ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD601SN1	600ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8		BLM18BD102SN1	1000ohm±25%	-	100mA		Kit			Flow	ReFlow
	0.8		BLM18BD152SN1	1500ohm±25%	-	50mA		Kit			Flow	ReFlow
	0.8		BLM18BD182SN1	1800ohm±25%	-	50mA		Kit			Flow	ReFlow
	0.8		BLM18BD222SN1	2200ohm±25%	-	50mA		Kit			Flow	ReFlow
	0.8		BLM18BD252SN1	2500ohm±25%	-	50mA		Kit			Flow	ReFlow
	0.8		BLM18BB050SN1	5ohm±25%	-	700mA		Kit			Flow	ReFlow
	0.8		BLM18BB100SN1	10ohm±25%	-	700mA		Kit			Flow	ReFlow
	0.8		BLM18BB220SN1	22ohm±25%	-	600mA		Kit			Flow	ReFlow
	0.8		BLM18BB470SN1	47ohm±25%	-	550mA		Kit			Flow	ReFlow
	0.8		BLM18BB600SN1	60ohm±25%	-	550mA		Kit			Flow	ReFlow
	0.8		BLM18BB750SN1	75ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18BB121SN1	120ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18BB141SN1	140ohm±25%	-	450mA					Flow	ReFlow
	0.8		BLM18BB151SN1	150ohm±25%	-	450mA		Kit			Flow	ReFlow
	0.8		BLM18BB221SN1	220ohm±25%	-	450mA		Kit			Flow	ReFlow
	0.8		BLM18BB331SN1	330ohm±25%	-	400mA		Kit			Flow	ReFlow
	0.8		BLM18BB471SN1	470ohm±25%	-	300mA		Kit			Flow	ReFlow
	0.8		BLM18BA050SN1	5ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18BA100SN1	10ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.8		BLM18BA220SN1	22ohm±25%	-	500mA					Flow	ReFlow
	0.8		BLM18BA470SN1	47ohm±25%	-	300mA		Kit			Flow	ReFlow
	0.8		BLM18BA750SN1	75ohm±25%	-	300mA		Kit			Flow	ReFlow
	0.8		BLM18BA121SN1	120ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.8	For Digital Interface Lines p63	BLM18RK121SN1	120ohm±25%	-	200mA					Flow	ReFlow
	0.8		BLM18RK221SN1	220ohm±25%	-	200mA					Flow	ReFlow
	0.8		BLM18RK471SN1	470ohm±25%	-	200mA					Flow	ReFlow
	0.8		BLM18RK601SN1	600ohm±25%	-	200mA					Flow	ReFlow
	0.8		BLM18RK102SN1	1000ohm±25%	-	200mA					Flow	ReFlow

Continued on the following page.

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	0.8	For Power Lines	Standard Type p50	BLM18PG300SN1	30ohm(Typ.)	-	1000mA	Kit ≥1A Flow ReFlow
	0.8			BLM18PG330SN1	33ohm±25%	-	3000mA	Kit ≥3A Flow ReFlow
	0.8			BLM18PG600SN1	60ohm(Typ.)	-	500mA	Kit Flow ReFlow
	0.8			BLM18PG121SN1	120ohm±25%	-	2000mA	Kit ≥1A Flow ReFlow
	0.8			BLM18PG181SN1	180ohm±25%	-	1500mA	Kit ≥1A Flow ReFlow
	0.8			BLM18PG221SN1	220ohm±25%	-	1400mA	Kit ≥1A Flow ReFlow
	0.8			BLM18PG331SN1	330ohm±25%	-	1200mA	Kit ≥1A Flow ReFlow
	0.8			BLM18PG471SN1	470ohm±25%	-	1000mA	Kit ≥1A Flow ReFlow
	0.6		Low DC Resistance Type p52	BLM18KG260TN1	26ohm±25%	-	6000mA	Kit ≥3A Flow ReFlow
	0.6			BLM18KG300TN1	30ohm±25%	-	5000mA	Kit ≥3A Flow ReFlow
	0.6			BLM18KG700TN1	70ohm±25%	-	3500mA	Kit ≥3A Flow ReFlow
	0.6			BLM18KG101TN1	100ohm±25%	-	3000mA	Kit ≥3A Flow ReFlow
	0.6			BLM18KG121TN1	120ohm±25%	-	3000mA	Kit ≥3A Flow ReFlow
	0.8			BLM18KG221SN1	220ohm±25%	-	2200mA	Kit ≥1A Flow ReFlow
	0.8			BLM18KG331SN1	330ohm±25%	-	1700mA	Kit ≥1A Flow ReFlow
	0.8			BLM18KG471SN1	470ohm±25%	-	1500mA	Kit ≥1A Flow ReFlow
	0.8			BLM18KG601SN1	600ohm±25%	-	1300mA	Kit ≥1A Flow ReFlow
	0.5		p54	BLM18SG260TN1	26ohm±25%	-	6000mA	Kit ≥3A Flow ReFlow
	0.5			BLM18SG700TN1	70ohm±25%	-	4000mA	Kit ≥3A Flow ReFlow
	0.5			BLM18SG121TN1	120ohm±25%	-	3000mA	Kit ≥3A Flow ReFlow
	0.5			BLM18SG221TN1	220ohm±25%	-	2500mA	Kit ≥1A Flow ReFlow
	0.5			BLM18SG331TN1	330ohm±25%	-	1500mA	Kit ≥1A Flow ReFlow
0603 (1608)	0.8	For GHz Band Noise	For General Signal Lines p92	BLM18HG471SN1	470ohm±25%	600ohm(Typ.)	200mA	Kit GHz Flow ReFlow
	0.8			BLM18HG601SN1	600ohm±25%	700ohm(Typ.)	200mA	Kit GHz Flow ReFlow
	0.8			BLM18HG102SN1	1000ohm±25%	1000ohm(Typ.)	100mA	Kit GHz Flow ReFlow
	0.8		For High Speed Signal Lines (Sharp Impedance Curve) p92	BLM18HE601SN1	600ohm±25%	600ohm(Typ.)	800mA	Kit GHz Flow ReFlow
	0.8			BLM18HE102SN1	1000ohm±25%	1000ohm(Typ.)	600mA	Kit GHz Flow ReFlow
	0.8			BLM18HE152SN1	1500ohm±25%	1500ohm(Typ.)	500mA	Kit GHz Flow ReFlow
	0.8			BLM18HD471SN1	470ohm±25%	1000ohm(Typ.)	100mA	Kit GHz Flow ReFlow
	0.8			BLM18HD601SN1	600ohm±25%	1200ohm(Typ.)	100mA	Kit GHz Flow ReFlow
	0.8			BLM18HD102SN1	1000ohm±25%	1700ohm(Typ.)	50mA	Kit GHz Flow ReFlow
	0.8			BLM18HB121SN1	120ohm±25%	500ohm±40%	200mA	Kit GHz Flow ReFlow
	0.8			BLM18HB221SN1	220ohm±25%	1100ohm±40%	100mA	Kit GHz Flow ReFlow
	0.8			BLM18HB331SN1	330ohm±25%	1600ohm±40%	50mA	Kit GHz Flow ReFlow
	0.8		For Digital Interface Lines p92	BLM18HK331SN1	330ohm±25%	400ohm±40%	200mA	Kit GHz Flow ReFlow
	0.8			BLM18HK471SN1	470ohm±25%	600ohm±40%	200mA	Kit GHz Flow ReFlow
	0.8			BLM18HK601SN1	600ohm±25%	700ohm±40%	100mA	Kit GHz Flow ReFlow
	0.8			BLM18HK102SN1	1000ohm±25%	1200ohm±40%	50mA	Kit GHz Flow ReFlow
	0.5		Universal Type [Power lines/ Signal lines] p96	BLM18EG101TN1	100ohm±25%	140ohm(Typ.)	2000mA	Kit ≥1A GHz Flow ReFlow
	0.8			BLM18EG121SN1	120ohm±25%	145ohm(Typ.)	2000mA	Kit ≥1A GHz Flow ReFlow
	0.8			BLM18EG221SN1	220ohm±25%	260ohm(Typ.)	2000mA	Kit ≥1A GHz Flow ReFlow
	0.5			BLM18EG221TN1	220ohm±25%	300ohm(Typ.)	1000mA	Kit ≥1A GHz Flow ReFlow
	0.5			BLM18EG331TN1	330ohm±25%	450ohm(Typ.)	500mA	Kit GHz Flow ReFlow
	0.5			BLM18EG391TN1	390ohm±25%	520ohm(Typ.)	500mA	Kit GHz Flow ReFlow
	0.8			BLM18EG471SN1	470ohm±25%	550ohm(Typ.)	500mA	Kit GHz Flow ReFlow
	0.8			BLM18EG601SN1	600ohm±25%	700ohm(Typ.)	500mA	Kit GHz Flow ReFlow
	0.8	For High-GHz Band Noise p98		BLM18GG471SN1	470ohm±25%	1800ohm±30%	200mA	Kit Hi-GHz ReFlow
0805 (2012)	0.85	For General Signal Lines p68		BLM21AG121SN1	120ohm±25%	-	800mA	Kit Flow ReFlow
	0.85			BLM21AG151SN1	150ohm±25%	-	800mA	Kit Flow ReFlow
	0.85			BLM21AG221SN1	220ohm±25%	-	800mA	Kit Flow ReFlow
	0.85			BLM21AG331SN1	330ohm±25%	-	700mA	Kit Flow ReFlow
	0.85			BLM21AG471SN1	470ohm±25%	-	700mA	Kit Flow ReFlow
	0.85			BLM21AG601SN1	600ohm±25%	-	600mA	Kit Flow ReFlow
	0.85			BLM21AG102SN1	1000ohm±25%	-	500mA	Kit Flow ReFlow

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Size Code in inch (in mm)	Thickness (mm)	Type	Part Number	Impedance at 100MHz/20°C	Impedance at 1GHz/20°C	Rated Current	New	Kit	≥1A ≥3A ≥10A	GHz Hi-GHz	Flow	ReFlow
0805 (2012)	0.85	For High Speed Signal Lines (Sharp Impedance Curve) p70	BLM21BD121SN1	120ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD151SN1	150ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21BD221SN1	220ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD331SN1	330ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21BD421SN1	420ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD471SN1	470ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD601SN1	600ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD751SN1	750ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21BD102SN1	1000ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD152SN1	1500ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD182SN1	1800ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BD222TN1	2200ohm±25%	-	200mA		Kit			Flow	ReFlow
	1.25		BLM21BD222SN1	2250ohm(Typ.)	-	200mA		Kit			Flow	ReFlow
	1.25		BLM21BD272SN1	2700ohm±25%	-	200mA		Kit			Flow	ReFlow
	0.85		BLM21BB050SN1	5ohm±25%	-	1000mA		Kit			Flow	ReFlow
	0.85		BLM21BB600SN1	60ohm±25%	-	800mA		Kit			Flow	ReFlow
	0.85		BLM21BB750SN1	75ohm±25%	-	700mA		Kit			Flow	ReFlow
	0.85		BLM21BB121SN1	120ohm±25%	-	600mA		Kit			Flow	ReFlow
	0.85		BLM21BB151SN1	150ohm±25%	-	600mA					Flow	ReFlow
	0.85		BLM21BB201SN1	200ohm±25%	-	500mA					Flow	ReFlow
	0.85		BLM21BB221SN1	220ohm±25%	-	500mA		Kit			Flow	ReFlow
	0.85		BLM21BB331SN1	330ohm±25%	-	400mA		Kit			Flow	ReFlow
	0.85		BLM21BB471SN1	470ohm±25%	-	400mA		Kit			Flow	ReFlow
	0.85	For Digital Interface Lines p73	BLM21RK121SN1	120ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21RK221SN1	220ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21RK471SN1	470ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21RK601SN1	600ohm±25%	-	200mA					Flow	ReFlow
	0.85		BLM21RK102SN1	1000ohm±25%	-	200mA					Flow	ReFlow
	0.85	For Power Lines p66	BLM21PG220SN1	22ohm±25%	-	6000mA		Kit	≥3A		Flow	ReFlow
	0.85		BLM21PG300SN1	30ohm(Typ.)	-	4000mA		Kit	≥3A		Flow	ReFlow
	0.85		BLM21PG600SN1	60ohm±25%	-	3500mA		Kit	≥3A		Flow	ReFlow
	0.85		BLM21PG121SN1	120ohm±25%	-	3000mA		Kit	≥3A		Flow	ReFlow
	0.85		BLM21PG221SN1	220ohm±25%	-	2000mA		Kit	≥1A		Flow	ReFlow
	0.85		BLM21PG331SN1	330ohm±25%	-	1500mA		Kit	≥1A		Flow	ReFlow
1206 (3216)	1.1	For Power Lines p75	BLM31PG330SN1	33ohm±25%	-	6000mA		Kit	≥3A		Flow	ReFlow
	1.1		BLM31PG500SN1	50ohm(Typ.)	-	3500mA		Kit	≥3A		Flow	ReFlow
	1.1		BLM31PG121SN1	120ohm±25%	-	3500mA		Kit	≥3A		Flow	ReFlow
	1.1		BLM31PG391SN1	390ohm±25%	-	2000mA		Kit	≥1A		Flow	ReFlow
	1.1		BLM31PG601SN1	600ohm±25%	-	1500mA		Kit	≥1A		Flow	ReFlow
1806 (4516)	1.6	For Power Lines p77	BLM41PG600SN1	60ohm(Typ.)	-	6000mA		Kit	≥3A		Flow	ReFlow
	1.6		BLM41PG750SN1	75ohm(Typ.)	-	3500mA		Kit	≥3A		Flow	ReFlow
	1.6		BLM41PG181SN1	180ohm±25%	-	3500mA		Kit	≥3A		Flow	ReFlow
	1.6		BLM41PG471SN1	470ohm±25%	-	2000mA		Kit	≥1A		Flow	ReFlow
	1.6		BLM41PG102SN1	1000ohm±25%	-	1500mA		Kit	≥1A		Flow	ReFlow
1210 (3225)	0.2	For Power Lines p79	BLE32PN300SN1	30ohm±10ohm	-	10000mA	New		≥10A		Flow	ReFlow
0804 (2010)	0.5	For General Signal Lines p80	BLA2AAG121SN4	120ohm±25%	-	100mA						ReFlow
	0.5		BLA2AAG221SN4	220ohm±25%	-	50mA						ReFlow
	0.5		BLA2AAG601SN4	600ohm±25%	-	50mA						ReFlow
	0.5		BLA2AAG102SN4	1000ohm±25%	-	50mA						ReFlow
	0.5	For High Speed Signal Lines p80	BLA2ABD750SN4	75ohm±25%	-	200mA						ReFlow
	0.5		BLA2ABD121SN4	120ohm±25%	-	200mA						ReFlow
	0.5		BLA2ABD221SN4	220ohm±25%	-	100mA						ReFlow
	0.5		BLA2ABD471SN4	470ohm±25%	-	100mA						ReFlow
	0.5		BLA2ABD601SN4	600ohm±25%	-	100mA						ReFlow
	0.5		BLA2ABD102SN4	1000ohm±25%	-	50mA						ReFlow
	0.5		BLA2ABB100SN4	10ohm±25%	-	200mA						ReFlow
	0.5		BLA2ABB220SN4	22ohm±25%	-	200mA						ReFlow
	0.5		BLA2ABB470SN4	47ohm±25%	-	200mA						ReFlow
	0.5		BLA2ABB121SN4	120ohm±25%	-	50mA						ReFlow
	0.5		BLA2ABB221SN4	220ohm±25%	-	50mA						ReFlow

Continued on the following page.

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Size Code in inch (in mm)	Thickness (mm)	Type	Part Number	Impedance at 100MHz/20°C	Impedance at 1GHz/20°C	Rated Current	New Kit ≧1A ≧3A ≧10A GHz Hi-GHz Flow ReFlow
1206 (3216)	0.8	For General Signal Lines p83	**BLA31AG300SN4**	30ohm±25%	-	200mA	Flow ReFlow
	0.8		**BLA31AG600SN4**	60ohm±25%	-	200mA	Flow ReFlow
	0.8		**BLA31AG121SN4**	120ohm±25%	-	150mA	Flow ReFlow
	0.8		**BLA31AG221SN4**	220ohm±25%	-	150mA	Flow ReFlow
	0.8		**BLA31AG601SN4**	600ohm±25%	-	100mA	Flow ReFlow
	0.8		**BLA31AG102SN4**	1000ohm±25%	-	50mA	Flow ReFlow
	0.8	For High Speed Signal Lines p83	**BLA31BD121SN4**	120ohm±25%	-	150mA	Flow ReFlow
	0.8		**BLA31BD221SN4**	220ohm±25%	-	150mA	Flow ReFlow
	0.8		**BLA31BD471SN4**	470ohm±25%	-	100mA	Flow ReFlow
	0.8		**BLA31BD601SN4**	600ohm±25%	-	100mA	Flow ReFlow
	0.8		**BLA31BD102SN4**	1000ohm±25%	-	50mA	Flow ReFlow

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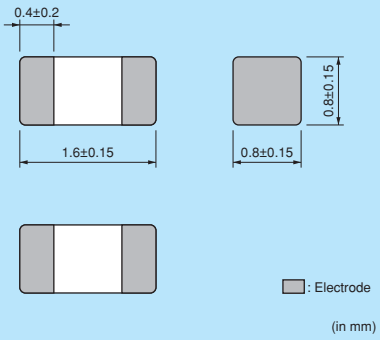
BLM18P Series 0603/1608 (inch/mm)

Hi Power | Flow OK | Reflow OK

0603 size for power lines.

*Please refer to the products designed for both power lines and signal lines.

■ Dimensions



■ Equivalent Circuit

(Resistance element becomes dominant at high frequencies.)

■ Packaging

Code	Packaging	Minimum Quantity
D	180mm Reel Paper Tape	4000
J	330mm Reel Paper Tape	10000
B	Bulk(Bag)	1000

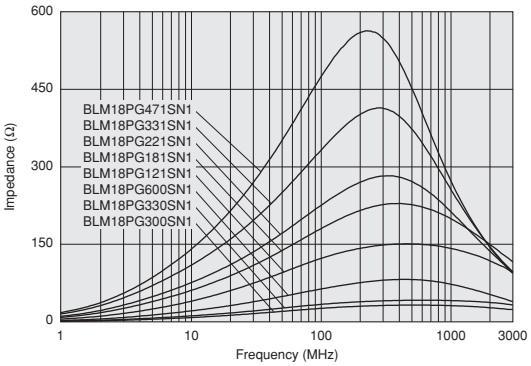
Refer to pages from p.100 to p.103 for mounting information.

■ Rated Value (□: packaging code)

Part Number	Impedance (at 100MHz/20°C)	Rated Current	DC Resistance	Operating Temperature Range	
BLM18PG300SN1□	30ohm (Typ.)	1000mA	0.05ohm max.	-55°C to +125°C	Kit ≧1A
BLM18PG330SN1□	33ohm ±25%	3000mA	0.025ohm max.	-55°C to +125°C	Kit ≧3A
BLM18PG600SN1□	60ohm (Typ.)	500mA	0.10ohm max.	-55°C to +125°C	Kit
BLM18PG121SN1□	120ohm ±25%	2000mA	0.05ohm max.	-55°C to +125°C	Kit ≧1A
BLM18PG181SN1□	180ohm ±25%	1500mA	0.09ohm max.	-55°C to +125°C	Kit ≧1A
BLM18PG221SN1□	220ohm ±25%	1400mA	0.10ohm max.	-55°C to +125°C	Kit ≧1A
BLM18PG331SN1□	330ohm ±25%	1200mA	0.15ohm max.	-55°C to +125°C	Kit ≧1A
BLM18PG471SN1□	470ohm ±25%	1000mA	0.20ohm max.	-55°C to +125°C	Kit ≧1A

Number of Circuits: 1

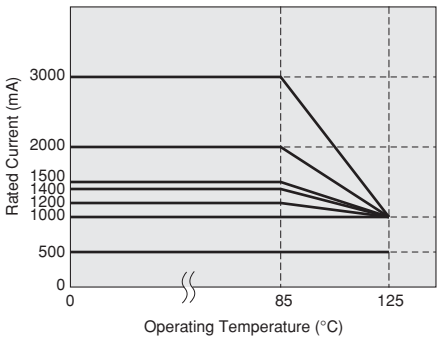
■ Impedance-Frequency Characteristics



■ Notice (Rating)

In operating temperature exceeding +85°C, derating of current is necessary for BLM18PG series.
Please apply the derating curve shown in chart according to the operating temperature.

Derating of Rated Current



Continued on the following page.

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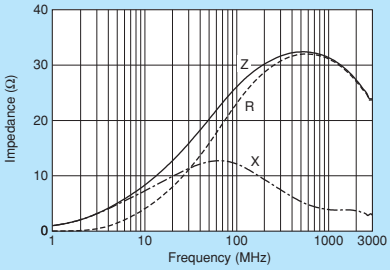
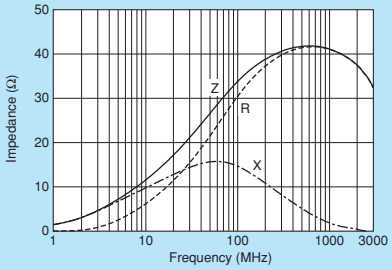
muRata

■ Impedance-Frequency Characteristics

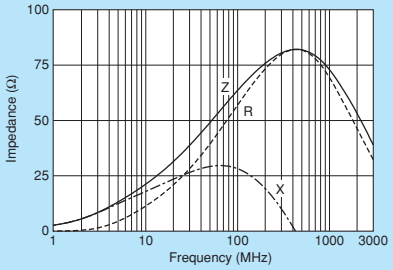
BLM18PG300SN1



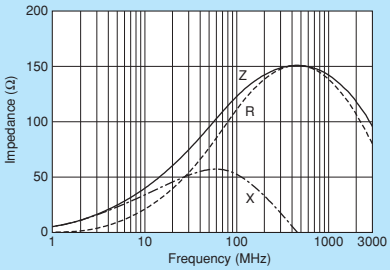
BLM18PG330SN1



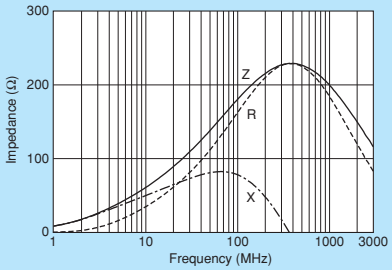
BLM18PG600SN1



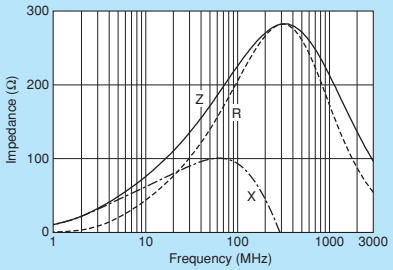
BLM18PG121SN1



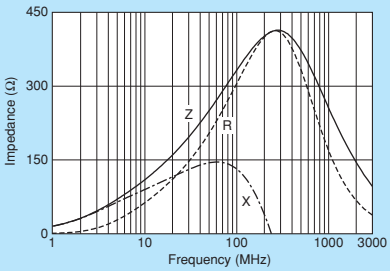
BLM18PG181SN1



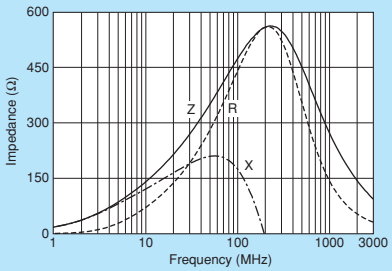
BLM18PG221SN1



BLM18PG331SN1



BLM18PG471SN1



⚠Caution

● Rating

1. About the Rated Current
   Do not use products beyond the rated current as this may create excessive heat and deteriorate the insulation resistance.
2. About the Excessive Surge Current
   Excessive surge current (pulse current or rush current) than specified rated current applied to the product may cause a critical failure, such as an open circuit, burnout caused by excessive temperature rise.Please contact us in advance in case of applying the surge current.

● Soldering and Mounting

• Self-heating
Please pay special attention when mounting chip ferrite beads BLM_AX/P/K/S series bead inductor BLE series in close proximity to other products that radiate heat.
The heat generated by other products may deteriorate the insulation resistance and cause excessive heat in this component.

Notice

● Storage and Operating Conditions

<Operating Environment>
Do not use products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.
Do not use products in the environment close to the organic solvent.
<Storage and Handling Requirements>

1. Storage Period
   BLM15E/15H/15G series should be used within 12 months, the other series should be used within 6 months.
   Solderability should be checked if this period is exceeded.
2. Storage Conditions
   (1) Storage temperature: -10 to +40˚C
   Relative humidity: 15 to 85%
   Avoid sudden changes in temperature and humidity.
   (2) Do not store products in a chemical atmosphere such as chlorine gas, acid or sulfide gas.

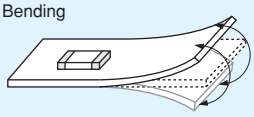
● Notice (Soldering and Mounting)

1. Cleaning
   Failure and degradation of a product are caused by the cleaning method. When you clean in conditions that are not in mounting information, please contact Murata engineering.
2. Soldering
   Reliability decreases with improper soldering methods. Please solder by the standard soldering conditions shown in mounting information.
3. Other
   Noise suppression levels resulting from Murata's EMI suppression filters EMIFIL® may vary, depending on the circuits and ICs used, type of noise, mounting pattern, mounting location, and other operating conditions. Be sure to check and confirm in advance the noise suppression effect of each filter, in actual circuits, etc. before applying the filter in a commercial-purpose equipment design.

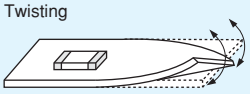
● Handling

1. Resin Coating
   Using resin for coating/molding products may affect the products performance.
   So please pay careful attention in selecting resin.
   Prior to use, please make the reliability evaluation with the product mounted in your application set.
2. Handling of a Substrate
   After mounting products on a substrate, do not apply any stress to the product caused by bending or twisting to the substrate when cropping the substrate, inserting and removing a connector from the substrate or tightening screw to the substrate.
   Excessive mechanical stress may cause cracking in the Product.

Bending



Twisting



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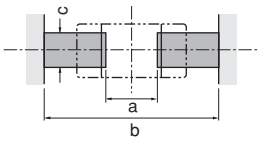
1. Standard Land Pattern Dimensions

Land Pattern + Solder Resist
Land Pattern Solder Resist
(in mm)

BLE32
BLM02
BLM03
BLM15
BLM18
BLM21
BLM31
BLM41

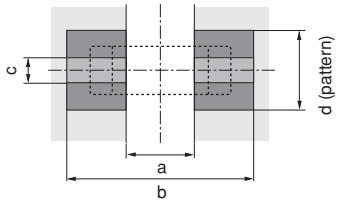
●Reflow and Flow
BLM Series



Type	Soldering	a	b	c
BLM02	Reflow	0.16-0.2	0.4-0.56	0.2-0.23
BLM03	Reflow	0.2-0.3	0.6-0.9	0.3
BLM15	Reflow	0.4	1.2-1.4	0.5
BLM18	Flow (except 18G)	0.7	2.2-2.6	0.7
	Reflow		1.8-2.0	
BLM21	Flow/ Reflow	1.2	3.0-4.0	1.0

• Except for BLM03PG·PX·EB/15AX·PD·PG·PX/18PG·KG·SG/21PG. And BLM02/03/15/18G is specially adapted for reflow soldering.

BLE32PN·BLM□□AX/P/K/S/E

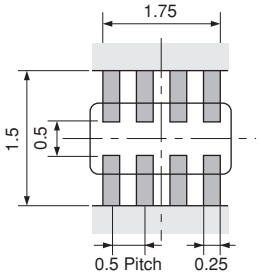


Type	Rated Current (A)	Soldering	a	b	c	Land Pad Thickness and Dimension d 18μm	35μm	70μm
BLE32PN	10	Flow/ Reflow	1.9	3.6	2.7	-	4.0 (Temperature 85°C or less)	-
						-	8.0 (Temperature 125°C or less)	-
BLM03AX BLM03P□ BLM03EB	0.9max.	Reflow	0.2-0.3	0.6-0.9	0.3	0.3	0.3	0.3
	1.8max.					1.2	0.7	0.3
BLM15AX BLM15PD BLM15PG BLM15PX	1.5max.	Reflow	0.4	1.2-1.4	0.5	0.5	0.5	0.5
	2.2max.					1.2	0.7	0.5
	3.0max.					2.4	1.2	0.5
BLM18PG BLM18KG BLM18SG	0.5-1.5	Flow/ Reflow	0.7	Flow 2.2-2.6 Reflow 1.8-2.0	0.7	0.7	0.7	0.7
	1.7-2.5					1.2	0.7	0.7
	3-4					2.4	1.2	0.7
	5-6					6.4	3.3	1.65
BLM21PG	1.5		1.2	3.0-4.0	1.0	1.0	1.0	1.0
	2					1.2	1.0	1.0
	3-4					2.4	1.2	1.0
	6					6.4	3.3	1.65
BLM31PG	1.5-2		2.0	4.2-5.2	1.2	1.2	1.2	1.2
	3.5					2.4	1.2	1.2
	6					6.4	3.3	1.65
BLM41PG	1.5-2		3.0	5.5-6.5		1.2	1.2	1.2
	3.5					2.4	1.2	1.2
	6					6.4	3.3	1.65

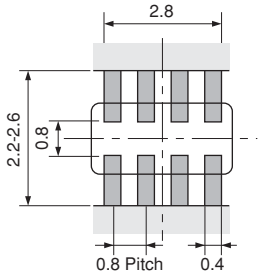
• About land pad thickness of BLE32PN, please note the upper limit of the temperature.
• Do not apply narrower pattern than listed above to BLM□□AX/P/K/S. Narrow pattern can cause excessive heat or open circuit.

BLA2A
BLA31

●Reflow Soldering
BLA2A



●Reflow and Flow
BLA31



• If there are high amounts of self-heating on pattern, the contact points of PCB and part may become damaged.

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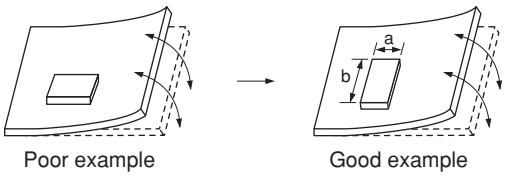
● PCB Warping

PCB should be designed so that products are not subjected to the mechanical stress caused by warping the board.

Products should be located in the sideways direction (Length: a<b) to the mechanical stress.

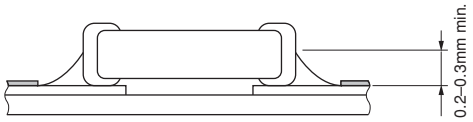
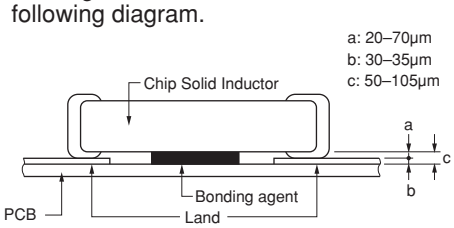
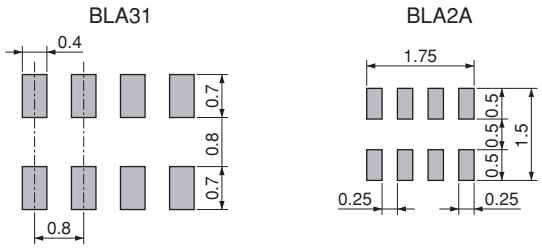
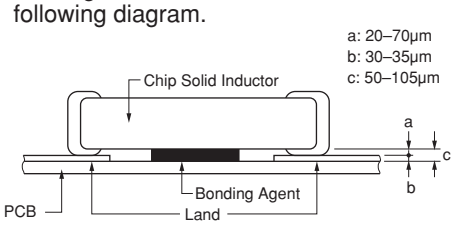


2. Solder Paste Printing and Adhesive Application

When reflow soldering the chip ferrite beads and bead inductor the printing must be conducted in accordance with the following cream solder printing conditions.
If too much solder is applied, the chip will be prone to damage by mechanical and thermal stress from the PCB and may crack.
Standard land dimensions should be used for resist and copper foil patterns.

When flow soldering the chip ferrite beads and bead inductor apply the adhesive in accordance with the following conditions.
If too much adhesive is applied, then it may overflow into the land or termination areas and yield poor solderability. In contrast, if insufficient adhesive is applied, or if the adhesive is not sufficiently hardened, then the chip may become detached during flow soldering process.

(in mm)

Series	Solder Paste Printing	Adhesive Application
BLM **BLE**	●Ensure that solder is applied smoothly to a minimum height of 0.2mm to 0.3mm at the end surface of the part. ●Guideline of solder paste thickness: 50-80μm: BLM02 100-150μm: BLM03 100-200μm: BLM15/18/21/31/41/BLE32 	■BLM18/21/31/41 Series (Except for BLM18G Series) Coating amount is illustrated in the following diagram. 
BLA	●Guideline of solder paste thickness: 100-150μm: BLA2A 150-200μm: BLA31 	■BLA31 Series Coating amount is illustrated in the following diagram. 

3. Standard Soldering Conditions

(1) Soldering Methods

Use flow and reflow soldering methods only.
Use standard soldering conditions when soldering chip ferrite beads and bead inductor.
In cases where several different parts are soldered, each having different soldering conditions, use those conditions requiring the least heat and minimum time.

Solder: Use Sn-3.0Ag-0.5Cu solder. Use of Sn-Zn based solder will deteriorate performance of products. If using BLA series with Sn-Zn based solder, please contact Murata in advance.

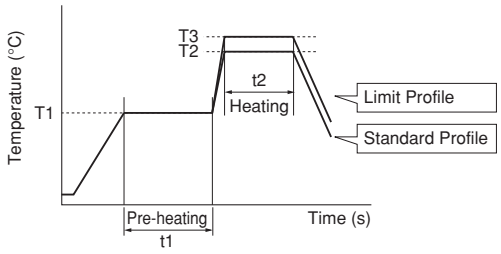
Flux:

- Use Rosin-based flux.
  In case of using RA type solder, products should be cleaned completely with no residual flux.
- Do not use strong acidic flux (with chlorine content exceeding 0.20wt%)
- Do not use water-soluble flux.

For additional mounting methods, please contact Murata.

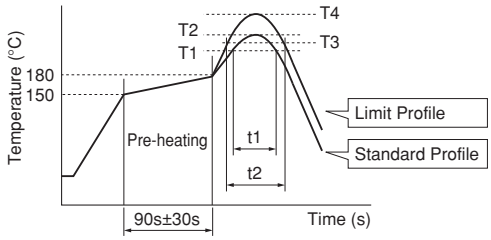
(2) Soldering Profile

●Flow Soldering Profile
(Sn-3.0Ag-0.5Cu Solder)



Series	Pre-heating		Standard Profile			Limit Profile		
			Heating		Cycle of Flow	Heating		Cycle of Flow
	Temp. (T1)	Time. (t1)	Temp. (T2)	Time. (t2)		Temp. (T3)	Time. (t2)	
BLM (Except for **BLM02/03/15/18G**) **BLE** **BLA31**	150°C	60s min.	250°C	4 to 6s	2 times max.	265±3°C	5s max.	2 times max.

●Reflow Soldering Profile
(Sn-3.0Ag-0.5Cu Solder)



Series	Standard Profile				Limit Profile			
	Heating		Peak Temperature (T2)	Cycle of Reflow	Heating		Peak Temperature (T4)	Cycle of Reflow
	Temp. (T1)	Time. (t1)			Temp. (T3)	Time. (t2)		
BLM **BLE** **BLA**	220°C min.	30 to 60s	245±3°C	2 times max.	230°C min.	60s max.	260°C/10s	2 times max.

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(3) Reworking with Solder Iron

The following conditions must be strictly followed when using a soldering iron.(Except for BLM02 Series)

Pre-heating: 150°C 60s min.

Soldering iron power output / Tip diameter:
80W max. / ø3mm max.

Temperature of soldering iron tip / Soldering time / Times:
350°C max. / 3-4s / 2 times

Do not allow the tip of the soldering iron to directly contact the chip.

For additional methods of reworking with a soldering iron, please contact Murata engineering.

4. Cleaning

Following conditions should be observed when cleaning chip ferrite beads.

(1) Cleaning Temperature: 60°C max. (40°C max. for alcohol type cleaner)

(2) Ultrasonic
Output: 20W/liter max.
Duration: 5 minutes max.
Frequency: 28 to 40kHz

(3) Cleaning Agent
The following list of cleaning agents have been tested on the individual components. Evaluation of final assembly should be completed prior to production.

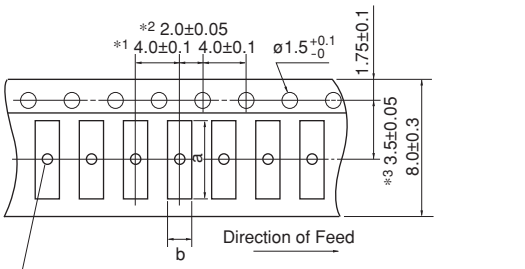
(a) Alcohol cleaning agent
Isopropyl alcohol (IPA)

(b) Aqueous cleaning agent
Pine Alpha ST-100S

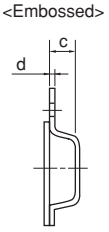
(4) Ensure that flux residue is completely removed.
Component should be thoroughly dried after aqueous agent has been removed with deionized water.

(5) BLM_G type is processed with resin. On rinsing the product, using water for ultrasonic cleaning may affect the resin quality used for the product by water element. In case of set cleaning conditions, please make sure the reliability according to the cleaning conditions.

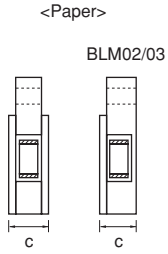
■ Minimum Quantity and Dimensions of 8mm Width Paper / Embossed Tape



There are holes in the cavities of the BLM21BD222SN1/BD272SN1 and BLM31 only. ø1.0 +0.3 -0.
BLE32 only. ø1.0 +0.2 -0.



c: Depth of Cavity (Embossed Tape)



c: Total Thickness of Tape (Paper Tape)

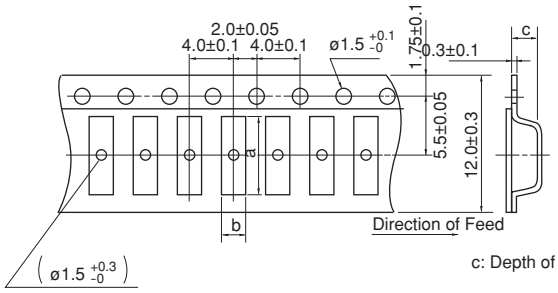
*1 BLM02/03/15: 2.0±0.05
BLM18S/18T/BLA2A: 2.0±0.1
*2 BLA2A/31: 2.0±0.1
*3 BLA2A/31: 3.5±0.1

Dimension of the cavity of embossed tape is measured at the bottom side.

Part Number	Dimensions				Minimum Qty. (pcs.)				
					ø180mm Reel		ø330mm Reel		Bulk
	a	b	c	d	Paper Tape	Embossed Tape	Paper Tape	Embossed Tape	
BLM02	0.45	0.25	0.40 max.	-	20000	-	-	-	1000
BLM03	0.70	0.40	0.55 max.	-	15000	-	50000	-	1000
BLM15	1.15	0.65	0.8 max.	-	10000	-	50000	-	1000
BLM18A/B/P/R/H/G	1.85	1.05	1.1 max.	-	4000	-	10000	-	1000
BLM18EG/KG_TN	1.85	1.05	0.85 max.	-	4000	-	10000	-	1000
BLM18EG/KG_SN			1.1 max.						
BLM18S	1.85	1.05	0.90 max.	-	10000	-	30000	-	1000
BLM18T	1.85	1.05	0.90 max.	-	10000	-	-	-	1000
BLM21	2.25	1.45	1.1 max.	-	4000	-	10000	-	1000
BLM31	3.5	1.9	1.3	0.2	-	3000	-	10000	1000
BLM21BD222SN1/272SN1	2.25	1.45	1.3	0.2	-	3000	-	10000	1000
BLE32	3.2	2.8	2.3	0.25	-	1500	-	7000	1000
BLA2A	2.2	1.2	0.8 max.	-	10000	-	50000	-	1000
BLA31	3.4	1.8	1.1 max.	-	4000	-	10000	-	1000

(in mm)

■ Minimum Quantity and Dimensions of 12mm Width Embossed Tape



c: Depth of Cavity

Dimension of the cavity is measured at the bottom side.

Part Number	Dimensions			Minimum Qty. (pcs.)		
	a	b	c	ø180mm Reel	ø330mm Reel	Bulk
BLM41	4.8	1.9	1.75	2500	8000	1000

(in mm)

"Minimum Quantity" means the number of units of each delivery or order. The quantity should be an integral multiple of the "Minimum Quantity."

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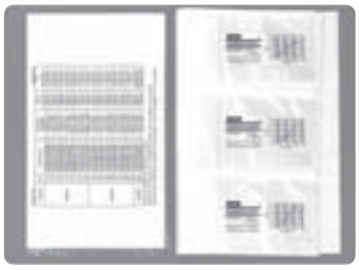

●EKEMBL03AL-KIT (Chip Ferrite Beads)

No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
1	BLM02AX100SN1	20	10Ω±5Ω	750	0.07
2	BLM02AX700SN1	20	70Ω±25%	300	0.4
3	BLM02AX121SN1	20	120Ω±25%	250	0.5
4	BLM03AG100SN1	20	10Ω (Typ.)	500	0.1
5	BLM03AG700SN1	20	70Ω (Typ.)	200	0.4
6	BLM03AG800SN1	20	80Ω±25%	200	0.4
7	BLM03AG121SN1	20	120Ω±25%	200	0.5
8	BLM03AG241SN1	20	240Ω±25%	200	0.8
9	BLM03AG601SN1	20	600Ω±25%	100	1.5
10	BLM03AG102SN1	20	1000Ω±25%	100	2.5
11	BLM03AX100SN1	20	10Ω (Typ.)	1000	0.05
12	BLM03AX800SN1	20	80Ω±25%	500	0.18
13	BLM03AX121SN1	20	120Ω±25%	450	0.23
14	BLM03AX241SN1	20	240Ω±25%	350	0.38
15	BLM03AX601SN1	20	600Ω±25%	250	0.85
16	BLM03AX102SN1	20	1000Ω±25%	200	1.25
17	BLM03BB100SN1	20	10Ω±25%	300	0.4
18	BLM03BB220SN1	20	22Ω±25%	200	0.5
19	BLM03BB470SN1	20	47Ω±25%	200	0.7
20	BLM03BB750SN1	20	75Ω±25%	200	1.0
21	BLM03BB121SN1	20	120Ω±25%	100	1.5
22	BLM03BD750SN1	20	75Ω±25%	300	0.4
23	BLM03BD121SN1	20	120Ω±25%	250	0.5
24	BLM03BD241SN1	20	240Ω±25%	200	0.8
25	BLM03BD471SN1	20	470Ω±25%	215	1.5
26	BLM03BD601SN1	20	600Ω±25%	200	1.7
27	BLM03BC330SN1	20	33Ω±25%	150	0.85
28	BLM03BC560SN1	20	56Ω±25%	100	1.05
29	BLM03BC800SN1	20	80Ω±25%	100	1.40
30	BLM03EB250SN1	20	25Ω±25%	600	0.26
31	BLM03EB500SN1	20	50Ω±25%	400	0.58
32	BLM03HG601SN1	20	600Ω±25%	150	1.6
33	BLM03HG102SN1	20	1000Ω±25%	125	2.6
34	BLM03HB191SN1	20	190Ω±25%	150	2.0
35	BLM03HD331SN1	20	330Ω±25%	200	1.0
36	BLM03HD471SN1	20	470Ω±25%	175	1.3
37	BLM03HD601SN1	20	600Ω±25%	150	1.7
38	BLM03HD102SN1	20	1000Ω±25%	120	2.9
39	BLM03PG220SN1	20	22Ω±25%	900	0.065
40	BLM03PG330SN1	20	33Ω±25%	750	0.090
41	BLM03PX220SN1	20	22Ω±25%	1800	0.040
42	BLM03PX330SN1	20	33Ω±25%	1500	0.055
43	BLM03PX800SN1	20	80Ω±25%	1000	0.130

●EKEMBL15AR-KIT (Chip Ferrite Beads)

No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
1	BLM15AG100SN1	20	10Ω (Typ.)	1000	0.025
2	BLM15AG700SN1	20	70Ω (Typ.)	600	0.15
3	BLM15AG121SN1	20	120Ω±25%	550	0.19
4	BLM15AG221SN1	20	220Ω±25%	450	0.29
5	BLM15AG601SN1	20	600Ω±25%	300	0.52
6	BLM15AG102SN1	20	1000Ω±25%	300	0.65
7	BLM15AX100SN1	20	10Ω±5Ω	1740	0.015
8	BLM15AX300SN1	20	30Ω±25%	1100	0.06

Continued on the following page.

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Design Kits
Chip Ferrite Bead
Chip EMIFIL®
Chip Common Mode Choke Coil
Block Type EMIFIL®
Microwave Absorber

Continued from the preceding page.

No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
9	BLM15AX700SN1	20	70Ω±25%	780	0.10
10	BLM15AX121SN1	20	120Ω±25%	700	0.13
11	BLM15AX221SN1	20	220Ω±25%	600	0.18
12	BLM15AX601SN1	20	600Ω±25%	500	0.34
13	BLM15AX102SN1	20	1000Ω±25%	350	0.49
14	BLM15BA050SN1	20	5Ω±25%	300	0.10
15	BLM15BA100SN1	20	10Ω±25%	300	0.20
16	BLM15BA220SN1	20	22Ω±25%	300	0.30
17	BLM15BA330SN1	20	33Ω±25%	300	0.40
18	BLM15BA470SN1	20	47Ω±25%	200	0.60
19	BLM15BA750SN1	20	75Ω±25%	200	0.80
20	BLM15BB050SN1	20	5Ω±25%	500	0.08
21	BLM15BB100SN1	20	10Ω±25%	300	0.10
22	BLM15BB220SN1	20	22Ω±25%	300	0.20
23	BLM15BB470SN1	20	47Ω±25%	300	0.35
24	BLM15BB750SN1	20	75Ω±25%	300	0.40
25	BLM15BB121SN1	20	120Ω±25%	300	0.55
26	BLM15BB221SN1	20	220Ω±25%	200	0.80
27	BLM15BC121SN1	20	120Ω±25%	350	0.45
28	BLM15BC241SN1	20	240Ω±25%	250	0.70
29	BLM15BD750SN1	20	75Ω±25%	300	0.20
30	BLM15BD121SN1	20	120Ω±25%	300	0.30
31	BLM15BD221SN1	20	220Ω±25%	300	0.40
32	BLM15BD471SN1	20	470Ω±25%	200	0.60
33	BLM15BD601SN1	20	600Ω±25%	200	0.65
34	BLM15BD102SN1	20	1000Ω±25%	200	0.90
35	BLM15BD182SN1	20	1800Ω±25%	100	1.40
36	BLM15BX750SN1	20	75Ω±25%	600	0.15
37	BLM15BX121SN1	20	120Ω±25%	600	0.17
38	BLM15BX221SN1	20	220Ω±25%	450	0.27
39	BLM15BX471SN1	20	470Ω±25%	350	0.41
40	BLM15BX601SN1	20	600Ω±25%	350	0.46
41	BLM15BX102SN1	20	1000Ω±25%	300	0.65
42	BLM15BX182SN1	20	1800Ω±25%	250	0.90
43	BLM15HD601SN1	20	600Ω±25%	300	0.85
44	BLM15HD102SN1	20	1000Ω±25%	250	1.25
45	BLM15HD182SN1	20	1800Ω±25%	200	2.20
46	BLM15HG601SN1	20	600Ω±25%	300	0.70
47	BLM15HG102SN1	20	1000Ω±25%	250	1.10
48	BLM15HB121SN1	20	120Ω±25%	300	0.70
49	BLM15HB221SN1	20	220Ω±25%	250	1.00
50	BLM15EG121SN1	20	120Ω±25%	1500	0.095
51	BLM15EG221SN1	20	220Ω±25%	700	0.28
52	BLM15GG221SN1	20	220Ω±25%	300	0.70
53	BLM15GG471SN1	20	470Ω±25%	200	1.30
54	BLM15GA750SN1	20	75Ω±25%	200	1.30
55	BLM15PG100SN1	20	10Ω (Typ.)	1000	0.025
56	BLM15PD300SN1	20	30Ω±25%	2200	0.035
57	BLM15PD600SN1	20	60Ω±25%	1700	0.06
58	BLM15PD800SN1	20	80Ω±25%	1500	0.07
59	BLM15PD121SN1	20	120Ω±25%	1300	0.09
60	BLM15PX330SN1	20	33Ω±25%	3000	0.022
61	BLM15PX600SN1	20	60Ω±25%	2500	0.032
62	BLM15PX800SN1	20	80Ω±25%	2300	0.038
63	BLM15PX121SN1	20	120Ω±25%	2000	0.055
64	BLM15PX181SN1	20	180Ω±25%	1500	0.090
65	BLM15PX221SN1	20	220Ω±25%	1400	0.10
66	BLM15PX331SN1	20	330Ω±25%	1200	0.15
67	BLM15PX471SN1	20	470Ω±25%	1000	0.20
68	BLM15PX601SN1	20	600Ω±25%	900	0.23

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●EKEMBL18AJ-KIT (Chip Ferrite Beads)

No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
1	BLM18AG121SN1	20	120Ω±25%	500	0.18
2	BLM18AG151SN1	20	150Ω±25%	500	0.25
3	BLM18AG221SN1	20	220Ω±25%	500	0.25
4	BLM18AG331SN1	20	330Ω±25%	500	0.30
5	BLM18AG471SN1	20	470Ω±25%	500	0.35
6	BLM18AG601SN1	20	600Ω±25%	500	0.38
7	BLM18AG102SN1	20	1000Ω±25%	400	0.50
8	BLM18BA050SN1	20	5Ω±25%	500	0.20
9	BLM18BA100SN1	20	10Ω±25%	500	0.25
10	BLM18BA470SN1	20	47Ω±25%	300	0.55
11	BLM18BA750SN1	20	75Ω±25%	300	0.70
12	BLM18BA121SN1	20	120Ω±25%	200	0.90
13	BLM18BB050SN1	20	5Ω±25%	700	0.05
14	BLM18BB100SN1	20	10Ω±25%	700	0.10
15	BLM18BB220SN1	20	22Ω±25%	600	0.20
16	BLM18BB470SN1	20	47Ω±25%	550	0.25
17	BLM18BB600SN1	20	60Ω±25%	550	0.25
18	BLM18BB750SN1	20	75Ω±25%	500	0.30
19	BLM18BB121SN1	20	120Ω±25%	500	0.30
20	BLM18BB151SN1	20	150Ω±25%	450	0.37
21	BLM18BB221SN1	20	220Ω±25%	450	0.45
22	BLM18BB331SN1	20	330Ω±25%	400	0.58
23	BLM18BB471SN1	20	470Ω±25%	300	0.85
24	BLM18BD470SN1	20	47Ω±25%	500	0.30
25	BLM18BD121SN1	20	120Ω±25%	200	0.40
26	BLM18BD151SN1	20	150Ω±25%	200	0.40
27	BLM18BD221SN1	20	220Ω±25%	200	0.45
28	BLM18BD331SN1	20	330Ω±25%	200	0.50
29	BLM18BD421SN1	20	420Ω±25%	200	0.55
30	BLM18BD471SN1	20	470Ω±25%	200	0.55
31	BLM18BD601SN1	20	600Ω±25%	200	0.65
32	BLM18BD102SN1	20	1000Ω±25%	100	0.85
33	BLM18BD152SN1	20	1500Ω±25%	50	1.20
34	BLM18BD182SN1	20	1800Ω±25%	50	1.50
35	BLM18BD222SN1	20	2200Ω±25%	50	1.50
36	BLM18BD252SN1	20	2500Ω±25%	50	1.50
37	BLM18PG300SN1	20	30Ω (Typ.)	1000	0.05
38	BLM18PG330SN1	20	33Ω±25%	3000	0.025
39	BLM18PG600SN1	20	60Ω (Typ.)	500	0.10
40	BLM18PG121SN1	20	120Ω±25%	2000	0.05
41	BLM18PG181SN1	20	180Ω±25%	1500	0.09
42	BLM18PG221SN1	20	220Ω±25%	1400	0.10
43	BLM18PG331SN1	20	330Ω±25%	1200	0.15
44	BLM18PG471SN1	20	470Ω±25%	1000	0.20
45	BLM18KG260TN1	20	26Ω±25%	6000	0.007
46	BLM18KG300TN1	20	30Ω±25%	5000	0.010
47	BLM18KG700TN1	20	70Ω±25%	3500	0.022
48	BLM18KG101TN1	20	100Ω±25%	3000	0.030
49	BLM18KG121TN1	20	120Ω±25%	3000	0.030
50	BLM18KG221SN1	20	220Ω±25%	2200	0.050
51	BLM18KG331SN1	20	330Ω±25%	1700	0.080
52	BLM18KG471SN1	20	470Ω±25%	1500	0.130
53	BLM18KG601SN1	20	600Ω±25%	1300	0.150
54	BLM18SG260TN1	20	26Ω±25%	6000	0.007
55	BLM18SG700TN1	20	70Ω±25%	4000	0.020
56	BLM18SG121TN1	20	120Ω±25%	3000	0.025
57	BLM18SG221TN1	20	220Ω±25%	2500	0.040
58	BLM18SG331TN1	20	330Ω±25%	1500	0.070

●EKEMBL8GAB-KIT (Chip Ferrite Beads / for High Frequency Type)

No.	Part Number	Quantity (pcs.)	Impedance (at 100MHz, 20 degrees C)	Impedance (at 1GHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
1	BLM18HG471SN1	20	470Ω±25%	600Ω (Typ.)	200	0.85
2	BLM18HG601SN1	20	600Ω±25%	700Ω (Typ.)	200	1.00
3	BLM18HG102SN1	20	1000Ω±25%	1000Ω (Typ.)	100	1.60

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No.	Part Number	Quantity (pcs.)	Impedance (at 100MHz, 20 degrees C)	Impedance (at 1GHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
4	BLM18HB121SN1	20	120Ω±25%	500Ω±40%	200	0.50
5	BLM18HB221SN1	20	220Ω±25%	1100Ω±40%	100	0.80
6	BLM18HB331SN1	20	330Ω±25%	1600Ω±40%	50	1.20
7	BLM18HD471SN1	20	470Ω±25%	1000Ω (Typ.)	100	1.20
8	BLM18HD601SN1	20	600Ω±25%	1200Ω (Typ.)	100	1.50
9	BLM18HD102SN1	20	1000Ω±25%	1700Ω (Typ.)	50	1.80
10	BLM18HE601SN1	20	600Ω±25%	600Ω (Typ.)	800	0.25
11	BLM18HE102SN1	20	1000Ω±25%	1000Ω (Typ.)	600	0.35
12	BLM18HE152SN1	20	1500Ω±25%	1500Ω (Typ.)	500	0.50
13	BLM18HK331SN1	20	330Ω±25%	400Ω (Typ.)	200	0.50
14	BLM18HK471SN1	20	470Ω±25%	600Ω (Typ.)	200	0.70
15	BLM18HK601SN1	20	600Ω±25%	700Ω (Typ.)	100	0.90
16	BLM18HK102SN1	20	1000Ω±25%	1200Ω (Typ.)	50	1.50
17	BLM18EG101TN1	20	100Ω±25%	140Ω (Typ.)	2000	0.045
18	BLM18EG121SN1	20	120Ω±25%	145Ω (Typ.)	2000	0.04
19	BLM18EG221TN1	20	220Ω±25%	300Ω (Typ.)	1000	0.15
20	BLM18EG221SN1	20	220Ω±25%	260Ω (Typ.)	2000	0.05
21	BLM18EG331TN1	20	330Ω±25%	450Ω (Typ.)	500	0.21
22	BLM18EG391TN1	20	390Ω±25%	520Ω (Typ.)	500	0.30
23	BLM18EG471SN1	20	470Ω±25%	550Ω (Typ.)	500	0.21
24	BLM18EG601SN1	20	600Ω±25%	700Ω (Typ.)	500	0.35
25	BLM18GG471SN1	20	470Ω±25%	1800Ω±30%	200	1.30

●EKEMBL21AF-KIT (Chip Ferrite Beads / for Large-current P Type)

No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
1	BLM21AG121SN1	20	120Ω±25%	800	0.10
2	BLM21AG151SN1	20	150Ω±25%	800	0.10
3	BLM21AG221SN1	20	220Ω±25%	800	0.13
4	BLM21AG331SN1	20	330Ω±25%	700	0.16
5	BLM21AG471SN1	20	470Ω±25%	700	0.19
6	BLM21AG601SN1	20	600Ω±25%	600	0.21
7	BLM21AG102SN1	20	1000Ω±25%	500	0.28
8	BLM21BB050SN1	20	5Ω±25%	1000	0.02
9	BLM21BB600SN1	20	60Ω±25%	800	0.13
10	BLM21BB750SN1	20	75Ω±25%	700	0.16
11	BLM21BB121SN1	20	120Ω±25%	600	0.19
12	BLM21BB221SN1	20	220Ω±25%	500	0.26
13	BLM21BB331SN1	20	330Ω±25%	400	0.33
14	BLM21BB471SN1	20	470Ω±25%	400	0.40
15	BLM21BD121SN1	20	120Ω±25%	200	0.25
16	BLM21BD221SN1	20	220Ω±25%	200	0.25
17	BLM21BD421SN1	20	420Ω±25%	200	0.30
18	BLM21BD471SN1	20	470Ω±25%	200	0.35
19	BLM21BD601SN1	20	600Ω±25%	200	0.35
20	BLM21BD102SN1	20	1000Ω±25%	200	0.40
21	BLM21BD152SN1	20	1500Ω±25%	200	0.45
22	BLM21BD182SN1	20	1800Ω±25%	200	0.50
23	BLM21BD222SN1	20	2250Ω (Typ.)	200	0.60
24	BLM21BD222TN1	20	2200Ω±25%	200	0.60
25	BLM21BD272SN1	20	2700Ω±25%	200	0.80
26	BLM21PG220SN1	20	22Ω±25%	6000	0.009
27	BLM21PG300SN1	20	30Ω (Typ.)	4000	0.014
28	BLM21PG600SN1	20	60Ω±25%	3500	0.02
29	BLM21PG121SN1	20	120Ω±25%	3000	0.03
30	BLM21PG221SN1	20	220Ω±25%	2000	0.045
31	BLM21PG331SN1	20	330Ω±25%	1500	0.07
32	BLM31PG330SN1	20	33Ω±25%	6000	0.009
33	BLM31PG500SN1	20	50Ω (Typ.)	3500	0.015
34	BLM31PG121SN1	20	120Ω±25%	3500	0.02
35	BLM31PG391SN1	20	390Ω±25%	2000	0.05
36	BLM31PG601SN1	20	600Ω±25%	1500	0.08
37	BLM41PG600SN1	20	60Ω (Typ.)	6000	0.009
38	BLM41PG750SN1	20	75Ω (Typ.)	3500	0.015
39	BLM41PG181SN1	20	180Ω±25%	3500	0.02

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No.	Part Number	Quantity (pcs.)	Impedance typ. (at 100MHz, 20 degrees C)	Rated Current (mA)	DC Resistance (Ω) max.
40	**BLM41PG471SN1**	20	470Ω±25%	2000	0.05
41	**BLM41PG102SN1**	20	1000Ω±25%	1500	0.09