



Product Change Notification

TE Connectivity

Product Change Notification: P-22-022290

PCN Date: 08-MAR-22

TE would like to inform you of the following change(s) to the listed TE Connectivity Product. In case of any further questions about this change(s), please contact your TE Connectivity Sales Engineer. Affected part, drawing and/or specification numbers are listed on the attached sheet(s).

General Product Description:
Multilayer Ferrite Beads Type BMB series

Description of Changes
The BMB series has been discontinued. The BMC series will replace this series PCN-22-130863 also refers
Other attachments:
[BMB - BMC Comparison](#)
[BMC Datasheet](#)
[Old Datasheet BMB A](#)
[Old Datasheet BMB B](#)
[Old Datasheet BMB L](#)
[Old Datasheet BMB R](#)

Reason for Changes:
Part status change. Production has been discontinued as a result of low overall production efficiency and synergies to TE strategy--A suitable strategic replacement has been enabled in order to continue to support market demand and customer needs.

Estimated Dates:

Last Order Date (Obsolete Parts Only):	First Date To Ship (Changed Parts Only):
08-MAR-2022	
Last Ship Date (Obsolete Parts Only):	Last Date for Mixed Shipments: (Changed Parts Only):
28-APR-2022	No Mixed Shipments

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1624117-0	YES			"BMB2A0220AN4", "BMB2A0220AN4JIT"	2176486-3		DCR 0.25 RC max. 300mA
1-1624117-1	YES			"BMB2A0300AN1", "BMB2A0300AN1JIT"	2176486-4		DCR 0.25 RC max. 300mA
1-1624117-3	YES			"BMB2A0300LN2", "BMB2A0300LN2JIT"	2176487-1		DCR 0.05 RC max. 3000mA
1-1624117-6	YES			"BMB2A0600BN3", "BMB2A0600BN3JIT"	2176486-5		DCR 0.35 RC max. 300mA
1-1624117-9	YES			"BMB2A1000BN3", "BMB2A1000BN3JIT"	2176486-1		DCR 0.45 RC max. 300mA
1624117-3	YES			"BMB2A0060LN2"	2176487-2		DCR 0.04 RC max. 3000mA
1624117-3	YES			"BMB2A0060LN2"	2176487-2		DCR 0.04 RC max. 3000mA
1624117-4	YES			"BMB2A0120AN1", "BMB2A0120AN1JIT"	2176486-2		DCR Max 0.20
1624117-5	YES			"BMB2A0120AN4", "BMB2A0120AN4JIT"	2176486-2		DCR Max 0.20
4-1624117-1	YES			"BMB2A0600AN4"	2176486-5		DCR 0.35 RC max. 300mA

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1624117-3	YES			"BMB2A0060LN2"	2176487-2		DCR 0.04 RC max. 3000mA

Part Number(s) being Modified:

Part Number	Part Discontinued per PCN	Customer Drawing	Customer Part Number	Alias Part Number(s)	Substitute Part Number	Substitute Alias Part Number(s)	Description Of Difference
1-1624117-0	YES			"BMB2A0220AN4", "BMB2A0220AN4JIT"	2176486-3		DCR 0.25 RC max. 300mA
1-1624117-1	YES			"BMB2A0300AN1", "BMB2A0300AN1JIT"	2176486-4		DCR 0.25 RC max. 300mA
1-1624117-3	YES			"BMB2A0300LN2", "BMB2A0300LN2JIT"	2176487-1		DCR 0.05 RC max. 3000mA
1-1624117-6	YES			"BMB2A0600BN3", "BMB2A0600BN3JIT"	2176486-5		DCR 0.35 RC max. 300mA
1-1624117-9	YES			"BMB2A1000BN3", "BMB2A1000BN3JIT"	2176486-1		DCR 0.45 RC max. 300mA
1624117-3	YES			"BMB2A0060LN2"	2176487-2		DCR 0.04 RC max. 3000mA
1624117-4	YES			"BMB2A0120AN1", "BMB2A0120AN1JIT"	2176486-2		DCR Max 0.20
1624117-5	YES			"BMB2A0120AN4", "BMB2A0120AN4JIT"	2176486-2		DCR Max 0.20
4-1624117-1	YES			"BMB2A0600AN4"	2176486-5		DCR 0.35 RC max. 300mA

BMB Series Multilayer Ferrite Beads

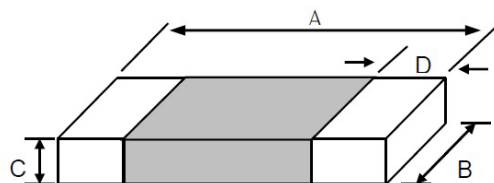
Production has been discontinued as a result of low overall production efficiency and synergies to TE strategy--A suitable strategic replacement has been enabled in order to continue to support market demand and customer needs.

Our new BMC series will allow us to achieve the standardisation needed to bring the same production efficiency as we have with other focus product lines. They will cover a wide range of impedance characteristics and will be offered in 0402, 0603, 0805 1204 and 1210 package sizes.

Original Part			Replacement Part		
TCPN	Product Number	Product Description	TCPN	Product Number	Product Description
1624117-4	BMB2A0120AN1	BMB-A 0805 120R N1	2176486-2	BMC2AY0120AN	BMC 0805 120R 25% A Gen C
1624117-5	BMB2A0120AN4	BMB-A 0805 120R N4	2176486-2	BMC2AY0120AN	BMC 0805 120R 25% A Gen C
1-1624117-0	BMB2A0220AN4	BMB-A 0805 220R	2176486-3	BMC2AY0220AN	BMC 0805 220R 25% A Gen C
1-1624117-1	BMB2A0300AN1	BMB-A 0805 300R	2176486-4	BMC2AY0300AN	BMC 0805 300R 25% A Gen C
4-1624117-1	BMB2A0600AN4	BMB-A 0805 600R N4	2176486-5	BMC2AY0600AN	BMC 0805 600R 25% A Gen C
4-1624117-0	BMB2A0600AN8	BMB-A 0805 600R N8	2176486-5	BMC2AY0600AN	BMC 0805 600R 25% A Gen C
1624117-6	BMB2A0120BN3	BMB-B 0805 120R	2176486-2	BMC2AY0120AN	BMC 0805 120R 25% A Gen C
1-1624117-9	BMB2A1000BN3	BMB-B 0805 1K	2176486-1	BMC2AY1000AN	BMC 0805 1K0 25% A Gen C
1-1624117-6	BMB2A0600BN3	BMB-B 0805 600R	2176486-5	BMC2AY0600AN	BMC 0805 600R 25% A Gen C
5-1624117-5	BMB2A0600BN7	BMB-B 0805 600R N7	2176486-5	BMC2AY0600AN	BMC 0805 600R 25% A Gen C
1-1624117-3	BMB2A0300LN2	BMB-L 0805 300R	2176487-1	BMC2AY0300AG	BMC 0805 300R 25% A Med C
1624117-3	BMB2A0060LN2	BMB-L 0805 60R	2176487-2	BMC2AY0060AG	BMC 0805 60R 25% A Med C

Product Comparison

Dimensions

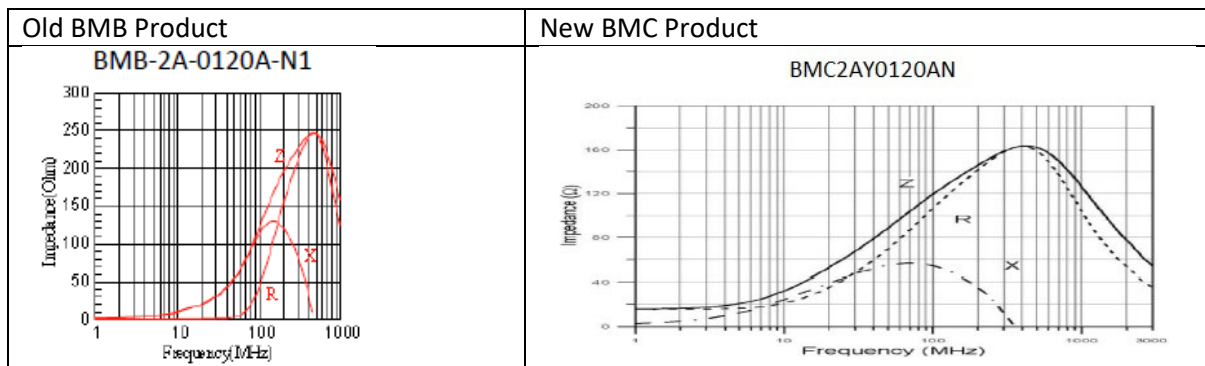


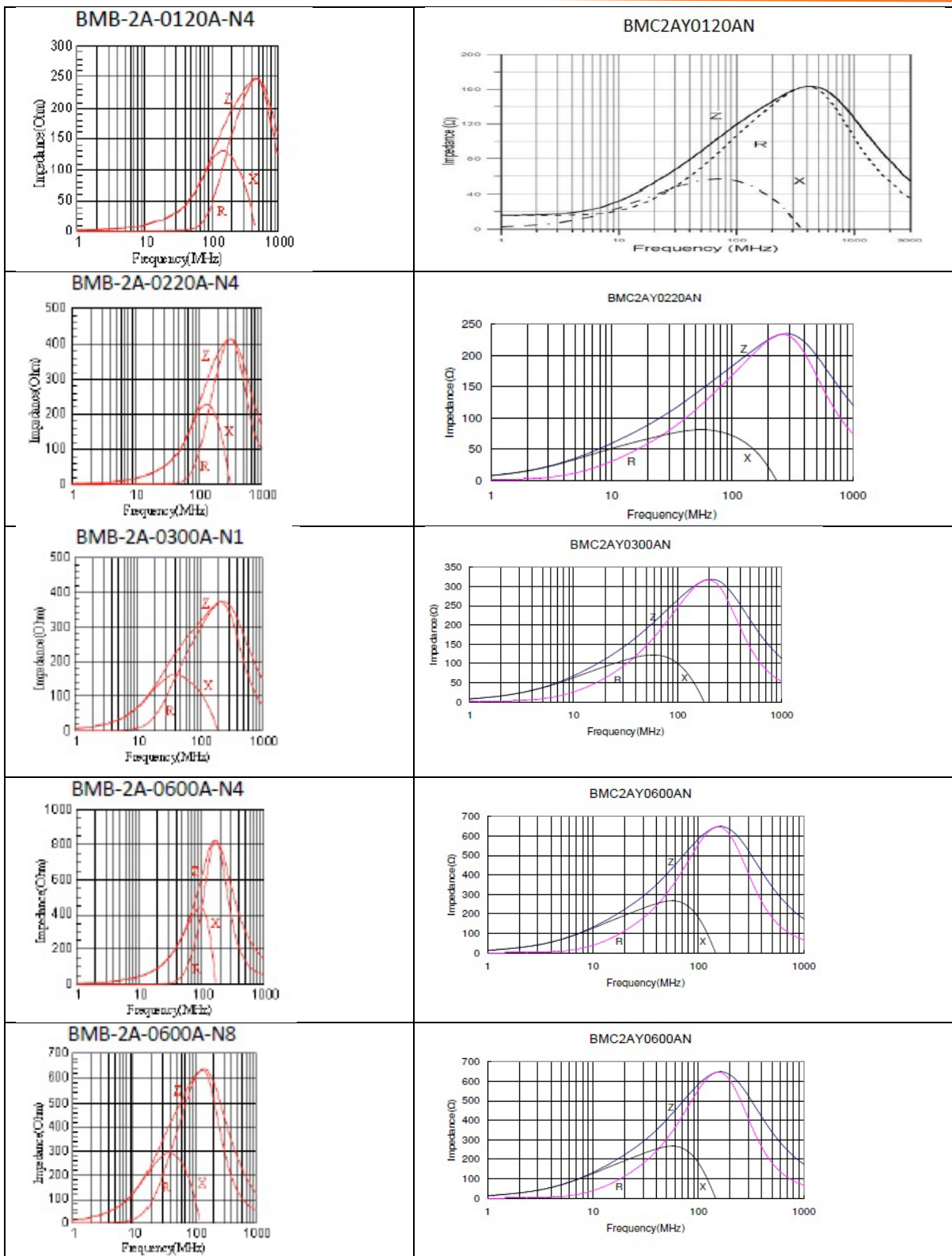
Type	Size (Inch)	A (mm)	B (mm)	C (mm)	D (mm)
BMB2A	0805	2.0 ±0.20	1.2 ±0.20	0.9 ±0.20	0.5 ±0.30
BMC2A	0805	2.0±0.20	1.25±0.20	0.9±0.20	0.2~0.8

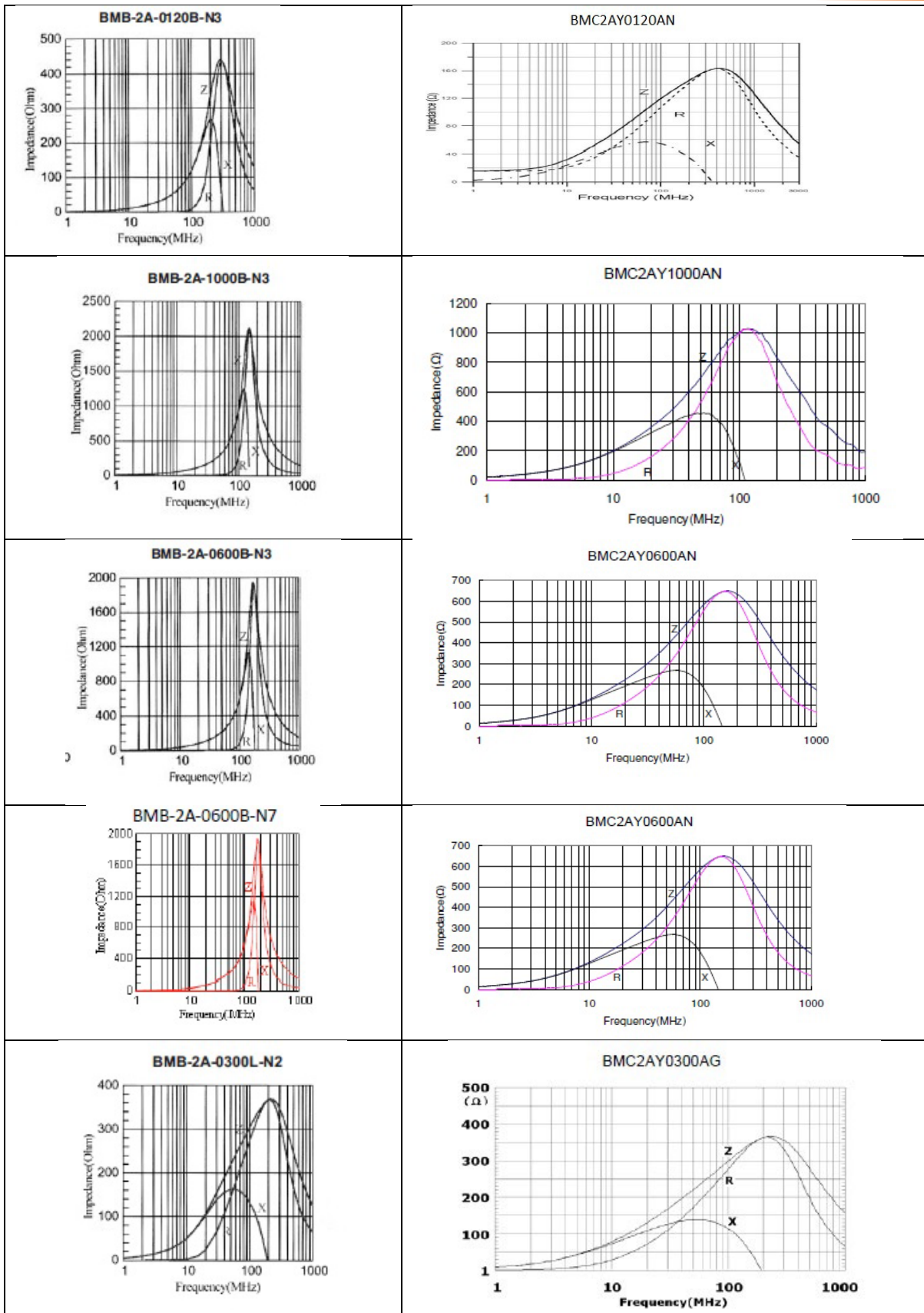
Electrical Characteristics

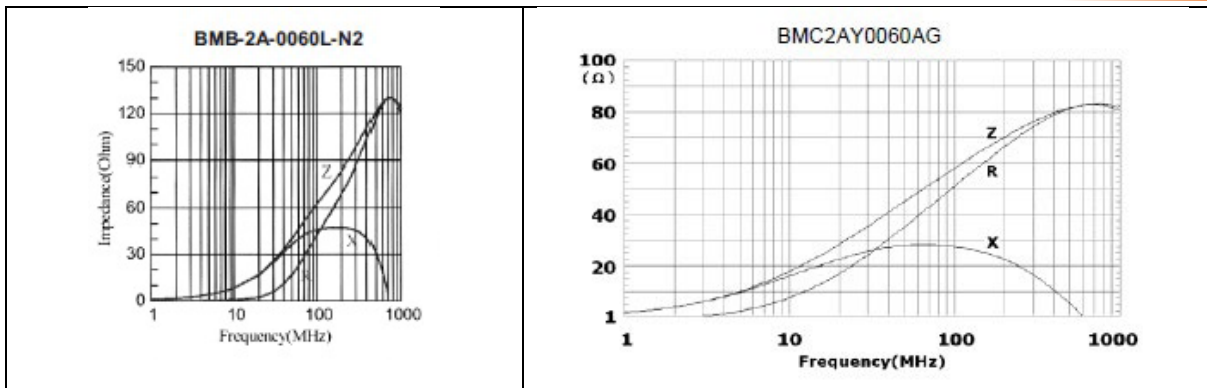
TCPN	ALIAS	Impedance (Ω)	Tolerance	Test Frequency	DCR (Ω) Max.	Rated Current (mA) Max.
1624117-4	BMB2A0120AN1	120	$\pm 25\%$	100	0.1	500
2176486-2	BMC2AY0120AN	120	$\pm 25\%$	100	0.20	300
1624117-5	BMB2A0120AN4	120	$\pm 25\%$	100	0.3	300
2176486-2	BMC2AY0120AN	120	$\pm 25\%$	100	0.20	300
1-1624117-0	BMB2A0220AN4	220	$\pm 25\%$	100	0.5	250
2176486-3	BMC2AY0220AN	220	$\pm 25\%$	100	0.25	300
1-1624117-1	BMB2A0300AN1	300	$\pm 25\%$	100	0.5	250
2176486-4	BMC2AY0300AN	300	$\pm 25\%$	100	0.25	300
4-1624117-1	BMB2A0600AN4	600	$\pm 25\%$	100	0.6	200
2176486-5	BMC2AY0600AN	600	$\pm 25\%$	100	0.35	300
4-1624117-0	BMB2A0600AN8	600	$\pm 25\%$	100	0.6	200
2176486-5	BMC2AY0600AN	600	$\pm 25\%$	100	0.35	300
1624117-6	BMB2A0120BN3	120	$\pm 25\%$	100	0.4	300
2176486-2	BMC2AY0120AN	120	$\pm 25\%$	100	0.20	300
1-1624117-9	BMB2A1000BN3	1000	$\pm 25\%$	100	0.8	200
2176486-1	BMC2AY1000AN	1000	$\pm 25\%$	100	0.45	300
1-1624117-6	BMB2A0600BN3	600	$\pm 25\%$	100	0.6	200
2176486-5	BMC2AY0600AN	600	$\pm 25\%$	100	0.35	300
5-1624117-5	BMB2A0600BN7	600	$\pm 25\%$	100	0.6	200
2176486-5	BMC2AY0600AN	600	$\pm 25\%$	100	0.35	300
1-1624117-3	BMB2A0300LN2	300	$\pm 25\%$	100	0.15	600
2176487-1	BMC2AY0300AG	300	$\pm 25\%$	100	0.05	3000
1624117-3	BMB2A0060LN2	60	$\pm 25\%$	100	0.05	850
2176487-2	BMC2AY0060AG	60	$\pm 25\%$	100	0.04	3000

Frequency Curves









Type BMC Series

Key Features

Effective EMI protection

Low DC resistance

High soldering heat resistance

Multiple size availability

Applications

Cellular Phones

Computers and Peripheral Equipment

Automation Controls

Sensors

VCRS, Television, Pagers

Circuit Where a Stable Ground is Unavailable



The BMC Series of beads cover a wide range of impedance characteristics. The chip beads have a monolithic inorganic material construction that minimises the effect of electromagnetic interference. This series is offered in 0402, 0603, 0805 1204 and 1210 package sizes

Characteristics – Electrical

Electrical Specifications

For General Signal Line Use (AN)

BMC 0201 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1HY0010AN	10	$\pm 25\%$	100	0.10	500
BMC1HY0030AN	30	$\pm 25\%$	100	0.30	300
BMC1HY0033AN	33	$\pm 25\%$	100	0.30	300
BMC1HY0040AN	40	$\pm 25\%$	100	0.30	300
BMC1HY0050AN	50	$\pm 25\%$	100	0.30	300
BMC1HY0060AN	60	$\pm 25\%$	100	0.35	300
BMC1HY0070AN	70	$\pm 25\%$	100	0.35	300
BMC1HY0100AN	100	$\pm 25\%$	100	0.40	200
BMC1HY0120AN	120	$\pm 25\%$	100	0.45	200
BMC1HY0150AN	150	$\pm 25\%$	100	0.50	200
BMC1HY0220AN	220	$\pm 25\%$	100	0.75	200
BMC1HY0300AN	300	$\pm 25\%$	100	0.90	150

BMC 0402 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1EY0010AN	10	±25%	100	0.05	500
BMC1EY0030AN	30	±25%	100	0.20	300
BMC1EY0040AN	40	±25%	100	0.20	300
BMC1EY0060AN	60	±25%	100	0.40	200
BMC1EY0068AN	68	±25%	100	0.15	500
BMC1EY0070AN	70	±25%	100	0.40	200
BMC1EY0080AN	80	±25%	100	0.40	200
BMC1EY0100AN	100	±25%	100	0.45	200
BMC1EY0120AN	120	±25%	100	0.50	200
BMC1EY0150AN	150	±25%	100	0.60	200
BMC1EY0180AN	180	±25%	100	0.65	100
BMC1EY0220AN	220	±25%	100	0.28	700
BMC1EY0240AN	240	±25%	100	0.30	500
BMC1EY0300AN	300	±25%	100	0.75	100
BMC1EY0330AN	330	±25%	100	0.75	100
BMC1EY0430AN	430	±25%	100	0.50	350
BMC1EY0470AN	470	±25%	100	0.90	100
BMC1EY0500AN	500	±25%	100	1.00	100
BMC1EY0600AN	600	±25%	100	1.10	50
BMC1EY1000AN	1000	±25%	100	1.50	50

BMC 0603 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1JY0019AN	19	±25%	100	0.10	400
BMC1JY0031AN	31	±25%	100	0.10	400
BMC1JY0052AN	52	±25%	100	0.15	400
BMC1JY0060AN	60	±25%	100	0.15	400
BMC1JY0075AN	75	±25%	100	0.15	400
BMC1JY0080AN	80	±25%	100	0.15	400
BMC1JY0100AN	100	±25%	100	0.15	400
BMC1JY0120AN	120	±25%	100	0.15	400
BMC1JY0150AN	150	±25%	100	0.15	400
BMC1JY0180AN	180	±25%	100	0.20	400
BMC1JY0200AN	200	±25%	100	0.20	400
BMC1JY0220AN	220	±25%	100	0.20	400
BMC1JY0240AN	240	±25%	100	0.17	500
BMC1JY0300AN	300	±25%	100	0.2	600
BMC1JY0400AN	400	±25%	100	0.30	400
BMC1JY0420AN	420	±25%	100	0.30	400

BMC 0603 AN (continued)

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1JY0450AN	450	$\pm 25\%$	100	0.30	400
BMC1JY0600AN	600	$\pm 25\%$	100	0.35	400
BMC1JY0750AN	750	$\pm 25\%$	100	0.35	400
BMC1JY1000AN	1000	$\pm 25\%$	100	0.55	300
BMC1JY1000AN1	1000	$\pm 25\%$	100	0.25	800
BMC1JY1500AN	1500	$\pm 25\%$	100	0.60	200

BMC 0805 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2AY0017AN	17	$\pm 25\%$	100	0.10	300
BMC2AY0026AN	26	$\pm 25\%$	100	0.10	300
BMC2AY0030AN	30	$\pm 25\%$	100	0.10	300
BMC2AY0031AN	31	$\pm 25\%$	100	0.10	300
BMC2AY0052AN	52	$\pm 25\%$	100	0.15	300
BMC2AY0060AN	60	$\pm 25\%$	100	0.15	300
BMC2AY0080AN	80	$\pm 25\%$	100	0.15	300
BMC2AY0100AN	100	$\pm 25\%$	100	0.20	300
BMC2AY0120AN	120	$\pm 25\%$	100	0.20	300
BMC2AY0150AN	150	$\pm 25\%$	100	0.20	300
BMC2AY0220AN	220	$\pm 25\%$	100	0.25	300
BMC2AY0300AN	300	$\pm 25\%$	100	0.25	300
BMC2AY0400AN	400	$\pm 25\%$	100	0.30	300
BMC2AY0470AN	470	$\pm 25\%$	100	0.18	700
BMC2AY0530AN	530	$\pm 25\%$	100	0.35	300
BMC2AY0600AN	600	$\pm 25\%$	100	0.35	300
BMC2AY1000AN	1000	$\pm 25\%$	100	0.45	300
BMC2AY1500AN	1500	$\pm 25\%$	100	0.70	300

BMC 1204 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2CY0019AN	19	$\pm 25\%$	100	0.10	800
BMC2CY0026AN	26	$\pm 25\%$	100	0.10	800
BMC2CY0031AN	31	$\pm 25\%$	100	0.10	800
BMC2CY0052AN	52	$\pm 25\%$	100	0.15	800

BMC 1204 AN (continued)

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2CY0060AN	60	±25%	100	0.15	500
BMC2CY0070AN	70	±25%	100	0.15	500
BMC2CY0100AN	100	±25%	100	0.20	450
BMC2CY0120AN	120	±25%	100	0.20	450
BMC2CY0150AN	150	±25%	100	0.20	450
BMC2CY0220AN	220	±25%	100	0.20	350
BMC2CY0300AN	300	±25%	100	0.20	350
BMC2CY0400AN	400	±25%	100	0.25	350
BMC2CY0600AN	600	±25%	100	0.25	350
BMC2CY0750AN	750	±25%	100	0.30	350
BMC2CY0800AN	800	±25%	100	0.30	350
BMC2CY1000AN	1000	±25%	100	0.35	350
BMC2CY1200AN	1200	±25%	100	0.35	350

BMC 1210 AN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2EY0031AN	31	±25%	100	0.10	500
BMC2EY0052AN	52	±25%	100	0.30	400
BMC2EY0060AN	60	±25%	100	0.30	400

Electrical Specifications**For General Signal Line, Frequency Higher Than A Use (KN)****BMC 0402 KN**

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1EY0220KN	220	±25%	100	0.80	100
BMC1EY0300KN	300	±25%	100	0.85	100

BMC 0603 KN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1JY1000KN	1000	±25%	100	0.85	100
BMC1JY1200KN	1200	±25%	100	0.85	100
BMC1JY1500KN	1500	±25%	100	0.90	100
BMC1JY1800KN	1800	±25%	100	1.00	100
BMC1JY2000KN	2000	±25%	100	1.00	100
BMC1JY2500KN	2500	±25%	100	1.00	50

BMC 0805 KN

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2AY0080KN	80	±25%	100	0.30	300
BMC2AY0600KN	600	±25%	100	0.35	200
BMC2AY1000KN	1000	±25%	100	0.40	200
BMC2AY1200KN	1200	±25%	100	0.40	200
BMC2AY1500KN	1500	±25%	100	0.45	200
BMC2AY2000KN	2000	±25%	100	0.60	200
BMC2AY2200KN	2200	±25%	100	0.60	200
BMC2AY2500KN	2500	±25%	100	0.70	200
BMC2AY2700KN	2700	±25%	100	0.70	200

Electrical Specifications**For Medium Current Line Use (AG)****BMC 0402 AG**

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1EY0010AG	10	±25%	100	0.03	2000
BMC1EY0030AG	30	±25%	100	0.03	3000
BMC1EY0060AG	60	±25%	100	0.075	1500
BMC1EY0070AG	70	±25%	100	0.09	1200
BMC1EY0100AG	100	±25%	100	0.09	1200
BMC1EY0120AG	120	±25%	100	0.075	1500
BMC1EY0220AG	220	±25%	100	0.20	1000

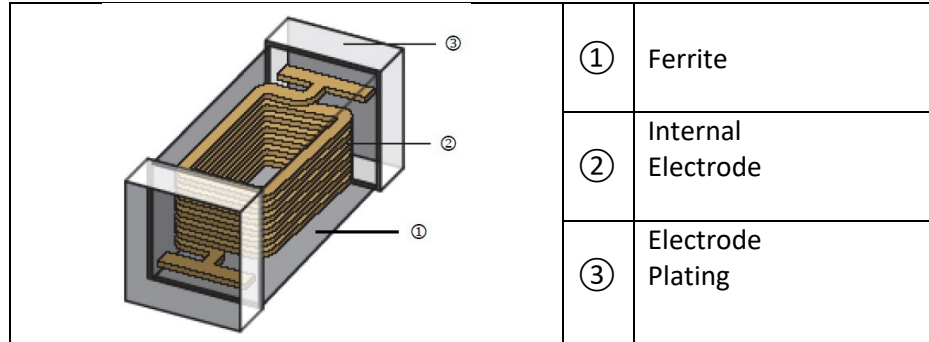
BMC 0603 AG

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC1JY0022AG	22	±25%	100	0.04	3000
BMC1JY0030AG	30	±25%	100	0.04	3000
BMC1JY0033AG	33	±25%	100	0.025	3000
BMC1JY0047AG	47	±25%	100	0.04	3000
BMC1JY0060AG	60	±25%	100	0.04	3000
BMC1JY0062AG	62	±25%	100	0.04	3000
BMC1JY0100AG	100	±25%	100	0.05	3000
BMC1JY0120AG	120	±25%	100	0.05	2000
BMC1JY0180AG	180	±25%	100	0.08	2000
BMC1JY0220AG	220	±25%	100	0.08	2000
BMC1JY0300AG	300	±25%	100	0.15	2000
BMC1JY0470AG	470	±25%	100	0.15	1500
BMC1JY0600AG	600	±25%	100	0.30	1000
BMC1JY0750AG	750	±25%	100	0.30	1000
BMC1JY1000AG	1000	±25%	100	0.25	1000

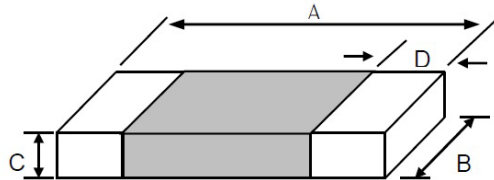
BMC 0805 AG

Part No.	Impedance (Ω)	Tolerance	TestFreq. (MHz)	DCR (Ω)max.	Rated Current (mA)max. at 85°C
BMC2AY0011AG	11	±25%	100	0.03	3000
BMC2AY0017AG	17	±25%	100	0.03	3000
BMC2AY0030AG	30	±25%	100	0.05	3000
BMC2AY0031AG	31	±25%	100	0.03	3000
BMC2AY0039AG	39	±25%	100	0.03	3000
BMC2AY0040AG	40	±25%	100	0.03	3000
BMC2AY0047AG	47	±25%	100	0.03	3000
BMC2AY0050AG	50	±25%	100	0.03	3000
BMC2AY0052AG	52	±25%	100	0.03	3000
BMC2AY0060AG	60	±25%	100	0.04	3000
BMC2AY0080AG	80	±25%	100	0.04	3000
BMC2AY0100AG	100	±25%	100	0.04	3000
BMC2AY0120AG	120	±25%	100	0.05	3000
BMC2AY0180AG	180	±25%	100	0.05	3000
BMC2AY0220AG	220	±25%	100	0.05	3000
BMC2AY0300AG	300	±25%	100	0.05	3000
BMC2AY0330AG	330	±25%	100	0.05	3000
BMC2AY0470AG	470	±25%	100	0.10	2000
BMC2AY0600AG	600	±25%	100	0.10	2000
BMC2AY1000AG	1000	±25%	100	0.30	1000
BMC2AY1500AG	1500	±25%	100	0.30	1000

Construction

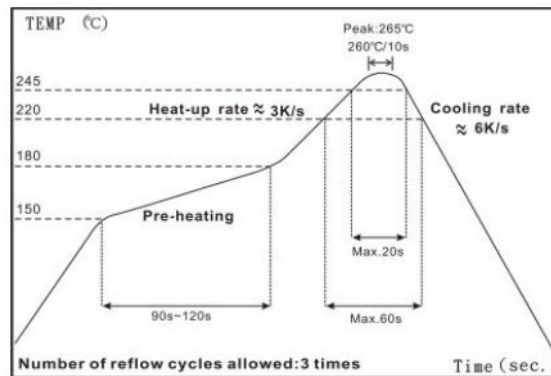


Dimensions



Type	Size (Inch)	A (mm)	B (mm)	C (mm)	D (mm)	Weight (g) (1000pcs)
BMC1H	0201	0.6±0.03	0.30±0.03	0.30±0.03	0.1~0.2	1.1
BMC1E	0402	1.0±0.10	0.50±0.10	0.5±0.10	0.1~0.35	2.6
BMC1J	0603	1.6±0.20	0.80±0.15	0.8±0.15	0.1~0.6	6.2
BMC2A	0805	2.0±0.20	1.25±0.20	0.9±0.20	0.2~0.8	10
BMC2C	1204	3.2±0.20	1.60±0.20	1.1±0.20	0.2~1.0	30
BMC2E	1210	3.2±0.20	2.50±0.20	1.3±0.20	0.2~1.0	54

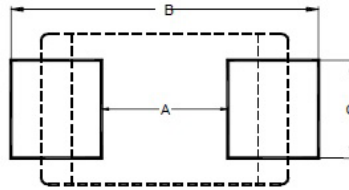
Soldering Condition



Time of IR reflow soldering at maximum temperature point 260°C : 10s

Time of soldering iron at maximum temperature point 280°C : 3s

Recommended PCB layout plan



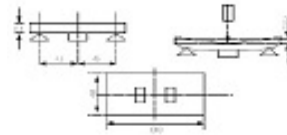
Type	Size (Inch)	A (mm)	B (mm)	C (mm)
BMC1H	0201	0.25	0.69	0.32
BMC1E	0402	0.50	2.10	0.55
BMC1J	0603	0.60	2.60	0.80
BMC2A	0805	0.66	3.23	1.47
BMC2C	1204	2.20	4.40	2.06
BMC2E	1210	2.13	4.06	2.74

Environmental Characteristics

Electrical Performance Test

Item	Specification	Test Methods
Impedance	As per Electrical spec.	HP4286A
DCR		HP 4338 digital mili-ohm meter

Mechanical Performance Test

Item	Specification	Test Methods
Substrate Bending Test	Without deformation cases Impedance: within $\pm 30\%$ of initial value DC Resistance shall be satisfied	Test device shall be soldered on the substrate Substrate Dimension: 100x40x0.8mm Deflection: 3.0mm Keeping Time: 10 seconds then return 
Vibration	Appearance: No damage Impedance: within $\pm 30\%$ of initial value DC Resistance shall be satisfied	Test device shall be soldered on the substrate Oscillation Frequency : 10 to 55 to 10Hz for 1min Amplitude : 1.5mm(peak-peak) Time : 2hrs for each axis (X,Y&Z), total 6hrs

Mechanical Performance Test (continued)

Item	Specification	Test Methods
Resistance to Soldering Heat	No visible damage Electrical characteristics and mechanical characteristics shall be satisfied	Solder temp: 265±5°C Immersion time: 6±1sec Preheating: 100°C to 150°C, 1 minute Measured after exposure in the room condition for 24hrs Solder: Sn-3Ag-0.5Cu
Solderability	95% min. coverage of all metallized area	Solder Temperature: 240±5°C Immersion Time: 3±1sec Solder: Sn-3Ag-0.5Cu
Terminal Strength	Without deformation cases Impedance: within±30% of initial value DC Resistance shall be satisfied	Solder chip on PCB and applied 10N (1.02Kgf) for 10 sec
Temperature Cycle	Appearance: No damage. Impedance: within±30% of initial value DC Resistance shall be satisfied	One cycle: step1: -55±3°C for 30±3min step2: standard atmospheric conditions 5s or less step3: 125±2°C for 30±3min step4: standard atmospheric conditions 5s or less Total: 100cycles Measured after exposure in the room condition for 24hrs
Humidity Resistance		Temperature: 60±2°C Relative Humidity: 90 ~ 95% Applied Current: Rated Current (maximum value) Time: 1008±12hrs Measured after exposure in the room condition for 24hrs
High Temperature Resistance		Temperature: 125±2°C Applied Current: Rated Current (maximum value) Time: 1008±12hrs Measured after exposure in the room condition for 24hrs
Low Temperature Storage Life Test		Temperature: -55±2°C Time: 1008±12hrs Measured after exposure in the room condition for 24hrs
Thermal Shock		-55°C~125°C kept stabilized for 30 minutes each for 100 cycles Measured after exposure in the room condition for 24hrs

Operating Temperature: -55°C ~ 125°C

Storage Temperature: <40°C ; Humidity 30~70%RH

Type BMB-A Series

Key Features

Effective EMI Protection

Wide Frequency Characteristics

High soldering Heat Resistance

Various Package Sizes Available

Suited to a Variety of Applications

Terminal finish matte Sn over Cu/Ni underplate



The BMB A Series of beads cover a wide range of impedance characteristics. The chip beads have a monolithic inorganic material construction that minimises the effect of electromagnetic interference. These are high loss types for general use. This series is offered in 0402, 0603, 0805 and 1206 package sizes

Electrical Performance

Part Number	Impedance (Ω) at 100MHz	DC Resistance (Ω) maximum	Rated Current (mA) maximum
BMB-1E-0030A-N8	30 \pm 25%	0.15	500
BMB-1E-0060A-N8	60 \pm 25%		
BMB-1E-0120A-N8	120 \pm 25%		
BMB-1E-0220A-N8	220 \pm 25%	0.25	300
BMB-1E-0300A-N8	300 \pm 25%	0.35	
BMB-1E-0470A-N8	470 \pm 25%	0.45	
BMB-1E-0600A-N8	600 \pm 25%	0.55	
BMB-1E-1000A-N8	1000 \pm 25%	0.65	200
		1.00	150
BMB-1J-0030A-N8	30 \pm 25%	0.20	400
BMB-1J-0040A-N8	40 \pm 25%		
BMB-1J-0060A-N8	60 \pm 25%		
BMB-1J-0080A-N8	80 \pm 25%	0.40	300
BMB-1J-0100A-N8	100 \pm 25%		
BMB-1J-0120A-N8	120 \pm 25%		
BMB-1J-0180A-N8	180 \pm 25%		
BMB-1J-0220A-N8	220 \pm 25%	0.50	200
BMB-1J-0240A-N8	240 \pm 25%		
BMB-1J-0300A-N8	300 \pm 25%		
BMB-1J-0450A-N8	450 \pm 25%		
BMB-1J-0600A-N8	600 \pm 25%	0.70	150
BMB-1J-1000A-N8	1000 \pm 25%	1.00	100
BMB-1J-1200A-N8	1200 \pm 25%		
BMB-1J-1500A-N8	1500 \pm 25%		
			200

Electrical Performance (continued)

Part Number	Impedance (Ω) at 100MHz * 50MHz * 30MHz	DC Resistance (Ω) maximum	Rated Current (mA) maximum
BMB-2A-0010A-N8	10 \pm 25%	0.10	600
BMB-2A-0017A-N8	17 \pm 25%		500
BMB-2A-0030A-N8	30 \pm 25%		
BMB-2A-0080A-N4	80 \pm 25%	0.30	400
BMB-2A-0120A-N4	120 \pm 25%		300
BMB-2A-0120A-N8			
BMB-2A-0150A-N8	150 \pm 25%	0.50	250
BMB-2A-0220A-N4	220 \pm 25%		
BMB-2A-0300A-N8	300 \pm 25%		
BMB-2A-0400A-N8	400 \pm 25%	0.60	200
BMB-2A-0600A-N4	600 \pm 25%		
BMB-2A-0600A-N8			
BMB-2A-1000A-N4	1000 \pm 25%	0.80	100
BMB-2A-1200A-N4	1200 \pm 25%		
BMB-2A-1500A-N4	1500 \pm 25%	1.00	
BMB-2A-2000A-N4	2000 \pm 25%		
BMB-2A-2200A-N4	2200 \pm 25%		
BMB-2A-2700A-N4	2700 \pm 25%	1.50	
BMB-2B-0026A-N8	26 \pm 25%	0.20	600
BMB-2B-0031A-N8	31 \pm 25%		500
BMB-2B-0050A-N8	50 \pm 25%		
BMB-2B-0070A-N8	70 \pm 25%		
BMB-2B-0090A-N8	90 \pm 25%	0.30	400
BMB-2B-0120A-N4	120 \pm 25%		
BMB-2B-0150A-N4	150 \pm 25%		
BMB-2B-0220A-N4	220 \pm 25%	0.40	300
BMB-2B-0400A-N4	400 \pm 25%		
BMB-2B-0500A-N8	500 \pm 25%		
BMB-2B-0600A-N8	600 \pm 25%	0.50	250
BMB-2B-1200A-N8	*1200 \pm 25%	0.70	200
BMB-2B-1500A-N8	*1500 \pm 25%	1.00	
BMB-2B-2000A-N8	**2000 \pm 25%	1.50	150

Operating temperature range - -55 ~ +125°C

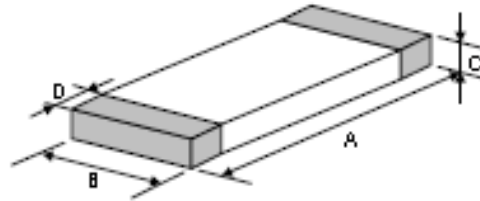
Temperature should be less than 25°C when rated current is applied.

Storage:

Temperature Range: -40 ~ +85°C

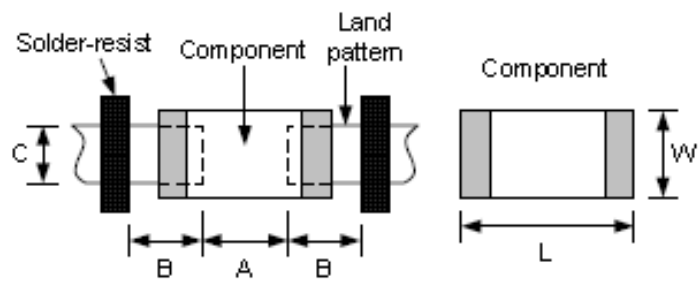
Humidity: Less than 75% RH

Product Dimensions



Size	A (mm)	B (mm)	C (mm)	D (mm)
0402	1.0 ±0.10	0.5 ±0.10	0.5 ±0.10	0.25 ±0.10
0603	1.6 ±0.15	0.8 ±0.15	0.8 ±0.15	0.3 ±0.20
0805	2.0 ±0.20	1.2 ±0.20	0.9 ±0.20	0.5 ±0.30
1206	3.2 ±0.20	1.6 ±0.20	1.1 ±0.20	0.5 ±0.30

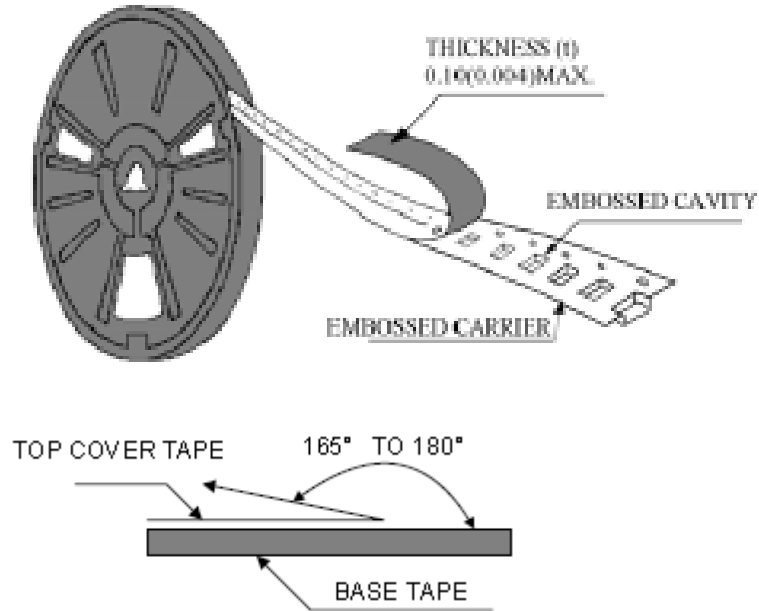
Recommended PCB Layout



Size	0402	0603	0805	1206	
Component	L	1.0	1.6	2.0	3.2
	W	0.5	0.8	1.2	1.6
A	0.45 ~ 0.55	0.6 ~ 0.8	0.8 ~ 1.2	1.8 ~ 2.2	
B	0.40 ~ 0.50	0.6 ~ 0.8	0.8 ~ 1.2	1.1 ~ 1.6	
C	0.40 ~ 0.50	0.6 ~ 0.8	0.9 ~ 1.6	0.9 ~ 1.6	

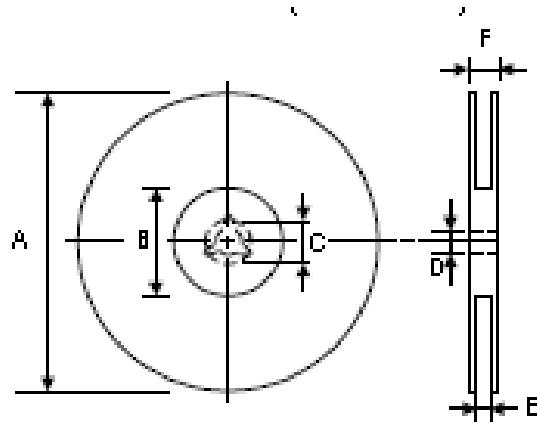
Packaging

Peel off force:

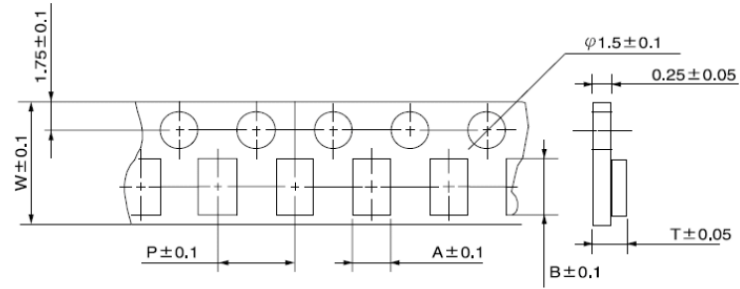


The force for peeling off cover tape is 10 grams in the direction shown

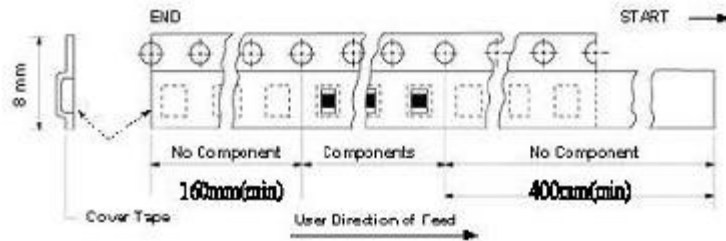
Dimensions (mm)



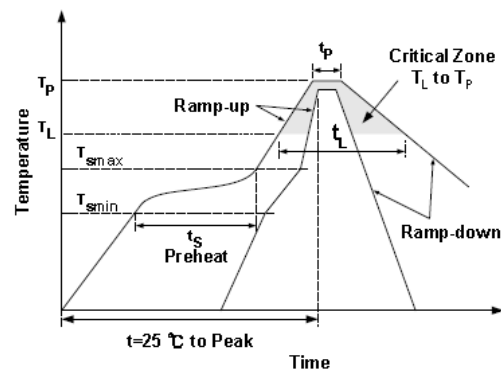
A	B	C	D	E	F
178 ±1	60 +0.5 -0.1	--	13 ±0.2	9 ±0.5	12 ±0.5



Size	A	B	W	P	T	Chips / Reel
0402	0.6	1.1	8	2	1.0	10000
0603	1.1	1.9	8	4	1.1	4000
0805	1.5	2.3	8	4	1.3	4000
1206	1.9	3.5	8	4	1.5	3000

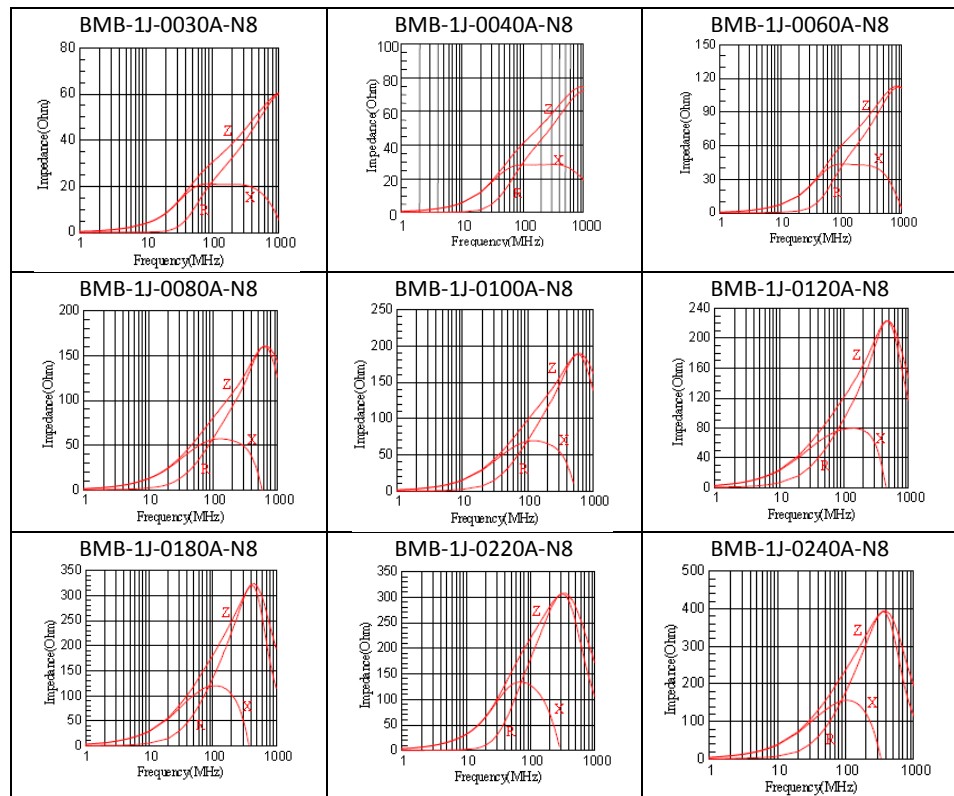
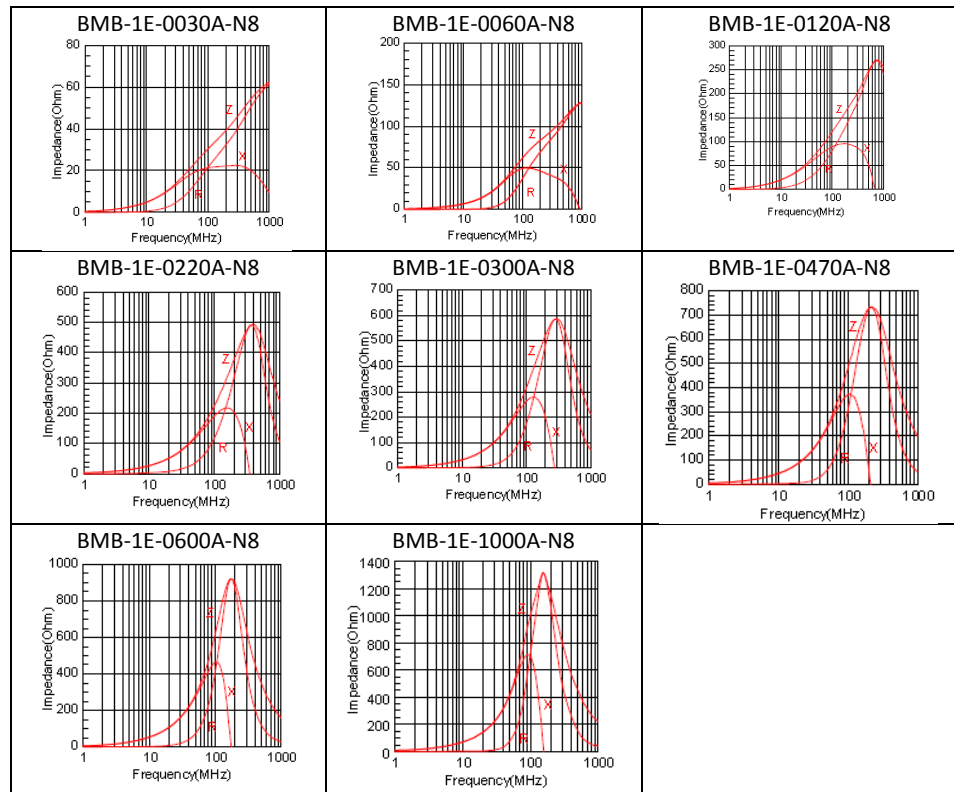


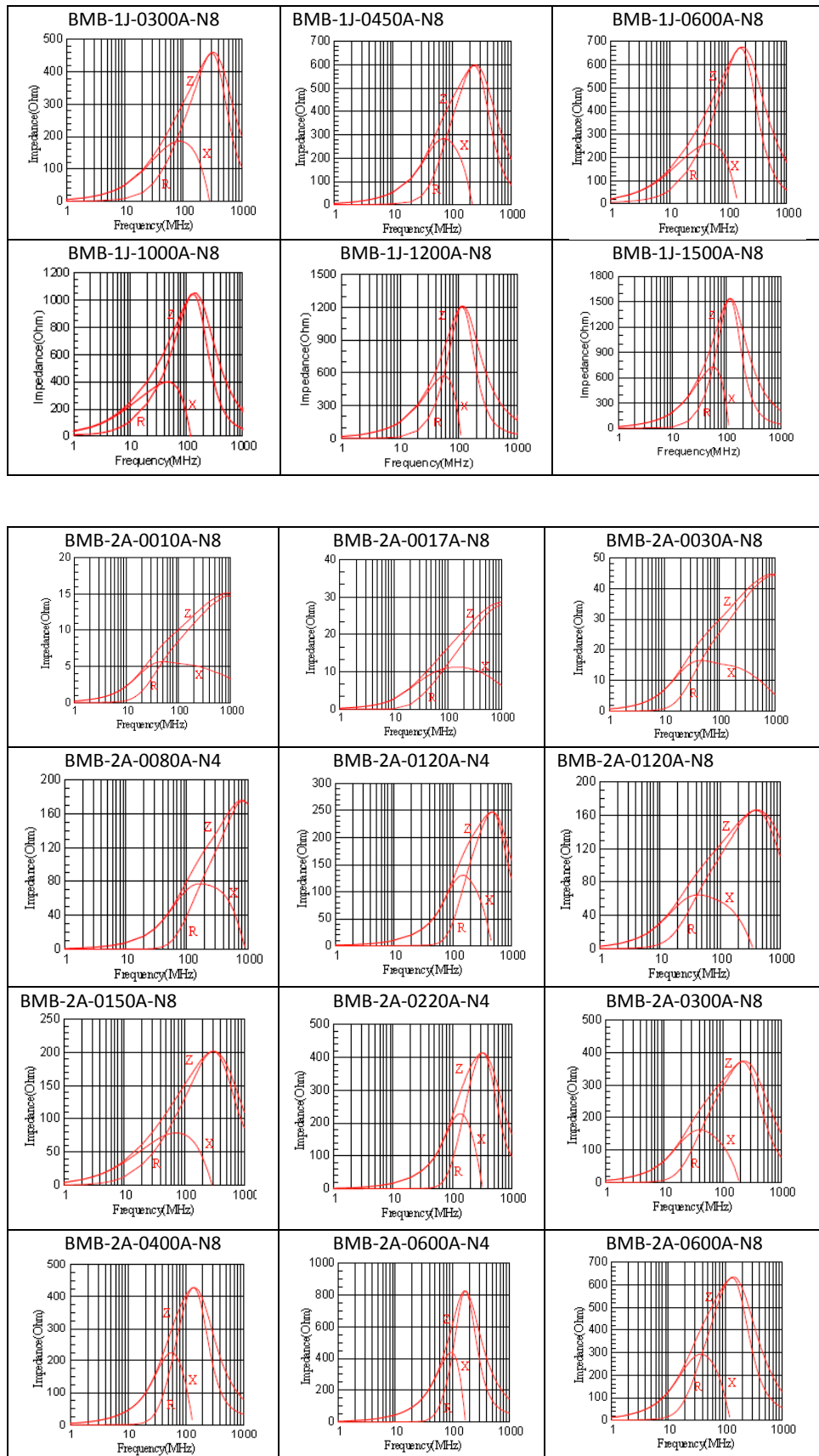
Recommended Reflow Solder Profile

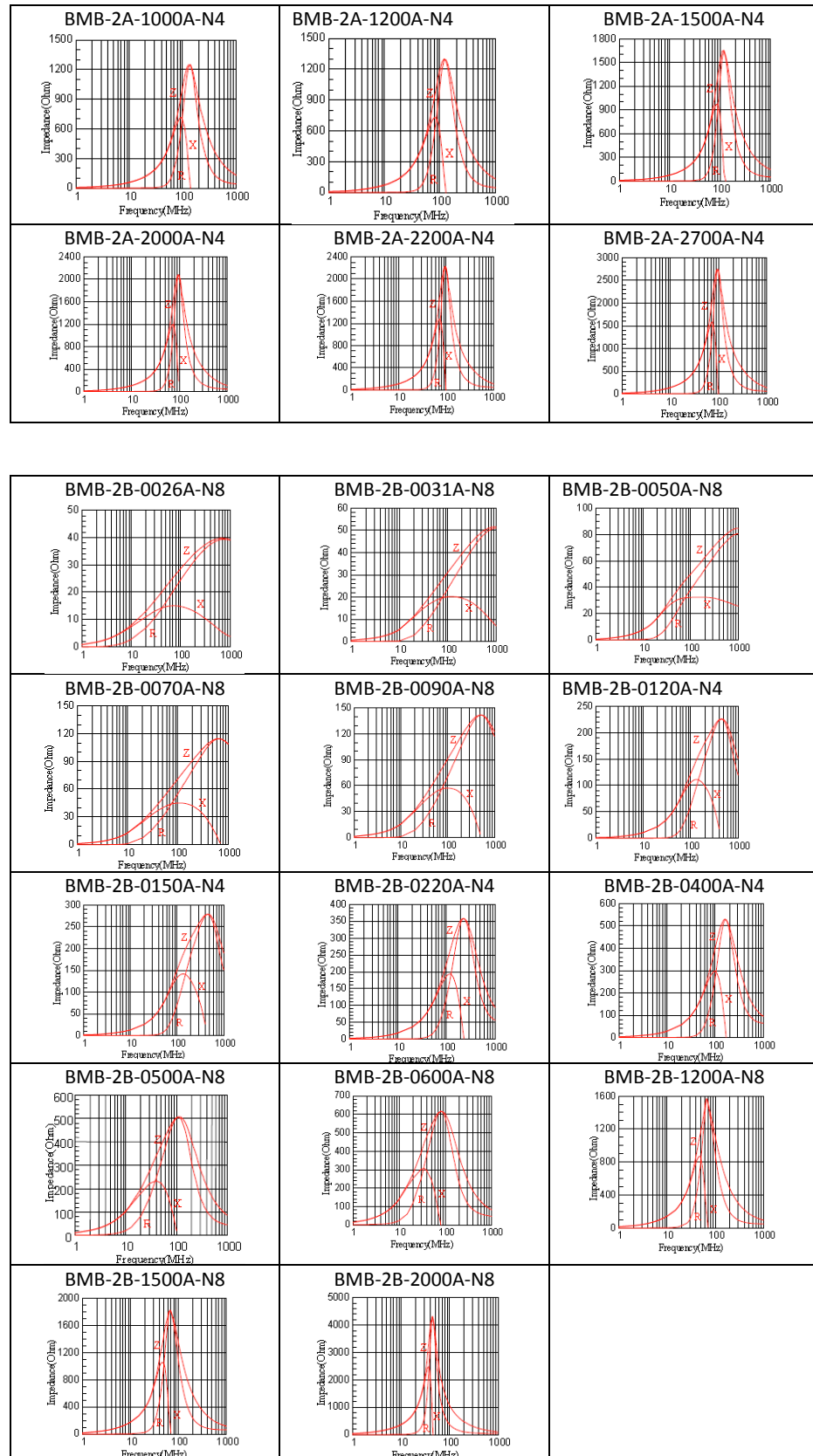


Profile Feature		Pb Free
Preheat	ts	60 ~ 180 seconds
	Tsmin	150°C
	Tsmax	200°C
Average Ramp up rate (Tsmax to Tp)		3°C/second max.
Time main above	Temperature (Tl)	217°C
	Time (tl)	60 ~ 150 seconds
Peak Temperature (Tp)		250 ~ 260°C
Time within 5°C of actual peak temperature ((tp)		10 seconds
Ramp down rate		6°C/second max.
Time 25°C to peak temperature		8 minutes max.

Typical Characteristic Curves (T=25°C)







Type BMB-B Series

Key Features

Effective EMI Protection

Wide Frequency Characteristics

High soldering Heat Resistance

Various Package Sizes Available

Suited to a Variety of Applications

Terminal finish matte Sn over Cu/Ni underplate



These beads are designed for high speed applications. The BMB-B Series will minimise the attenuation of the signal wave form due to its sharp impedance characteristics. This series is offered in 04:02, 06:03 and 08:05 package sizes

Electrical Performance

Part Number	Impedance (Ω) at 100MHz	DC Resistance (Ω) maximum	Rated Current (mA) maximum
BMB-1E-0022B-N7	22 \pm 25%	0.20	300
BMB-1E-0047B-N7	47 \pm 25%	0.35	
BMB-1E-0075B-N7	75 \pm 25%	0.40	
BMB-1E-0120B-N7	120 \pm 25%		
BMB-1E-0220B-N7	220 \pm 25%	0.60	
BMB-1E-0300B-N7	300 \pm 25%	0.80	
BMB-1E-0022B-N7	22 \pm 25%	0.20	
BMB-1J-0030B-N7	30 \pm 25%	0.30	250
BMB-1J-0070B-N7	70 \pm 25%	0.40	200
BMB-1J-0120B-N7	120 \pm 25%		
BMB-1J-0240B-N7	240 \pm 25%		
BMB-1J-0300B-N7	300 \pm 25%	0.50	100
BMB-1J-0420B-N7	420 \pm 25%		200
BMB-1J-0600B-N7	600 \pm 25%	0.60	100
BMB-2A-0007B-N7	7 \pm 25%	0.10	300
BMB-2A-0030B-N7	30 \pm 25%	0.20	
BMB-2A-0070B-N7	70 \pm 25%	0.40	
BMB-2A-0100B-N7	100 \pm 25%		
BMB-2A-0120B-N7	120 \pm 25%	0.50	
BMB-2A-0200B-N7	200 \pm 25%		
BMB-2A-0300B-N7	300 \pm 25%		
BMB-2A-0450B-N7	450 \pm 25%		

Electrical Performance (continued)

Part Number	Impedance (Ω) at 100MHz * 50MHz * 30MHz	DC Resistance (Ω) maximum	Rated Current (mA) maximum
BMB-2A-0600B-N7	600 \pm 25%	0.60	200
BMB-2A-0750B-N7	750 \pm 25%	0.70	
BMB-2A-1000B-N7	1000 \pm 25%	0.80	

Operating temperature range - -55 ~ +125°C

Temperature should be less than 25°C when rated current is applied.

Storage:

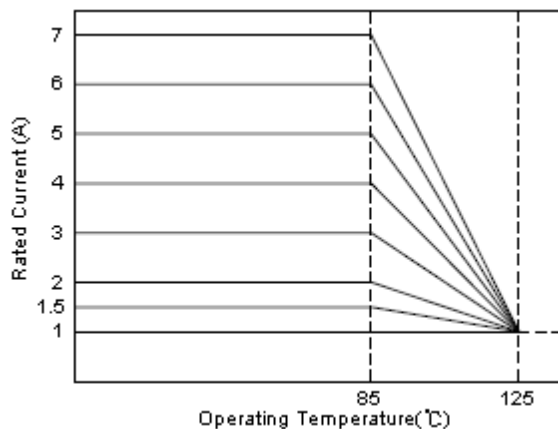
Temperature Range: -40 ~ +85°C

Humidity: Less than 75% RH

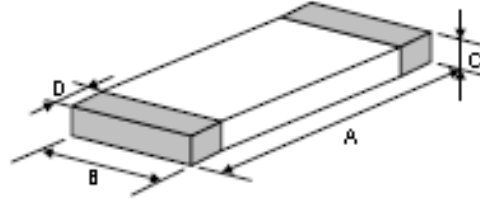
Current Derating

In operating temperatures exceeding +85°C derating of current is necessary for chip ferrite beads for which rated current is 1.5A or over.

Please apply the derating curve shown below according to the operating temperature

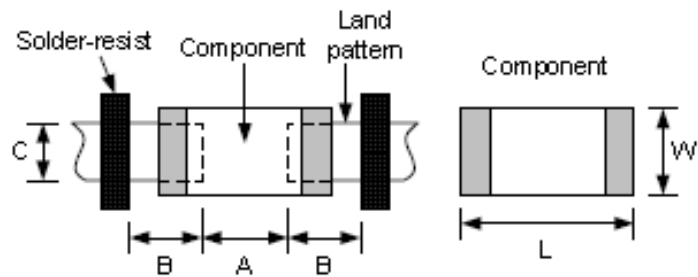


Product Dimensions



Size	A (mm)	B (mm)	C (mm)	D (mm)
0402	1.0 ±0.10	0.5 ±0.10	0.5 ±0.10	0.25 ±0.10
0603	1.6 ±0.15	0.8 ±0.15	0.8 ±0.15	0.3 ±0.20
0805	2.0 ±0.20	1.2 ±0.20	0.9 ±0.20	0.5 ±0.30

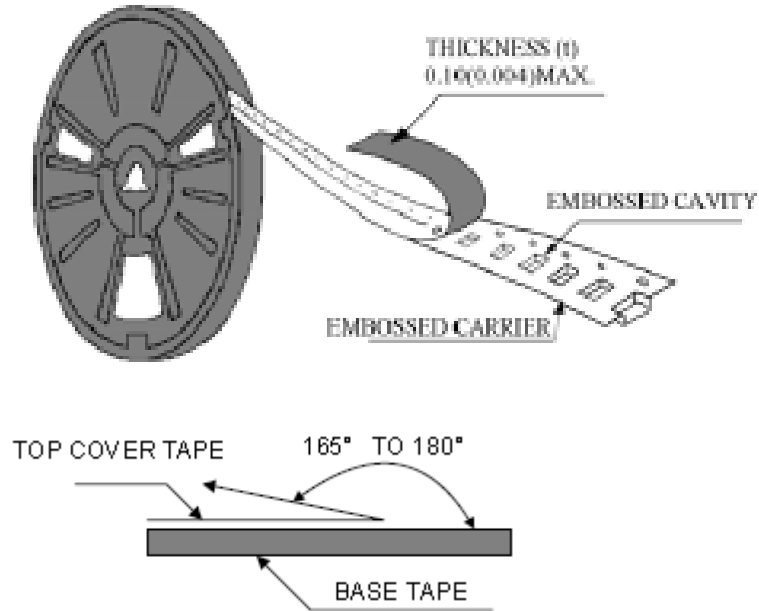
Recommended PCB Layout



Size	0402	0603	0805
Component	L	1.0	2.0
	W	0.5	1.2
A	0.45 ~ 0.55	0.6 ~ 0.8	0.8 ~ 1.2
B	0.40 ~ 0.50	0.6 ~ 0.8	0.8 ~ 1.2
C	0.40 ~ 0.50	0.6 ~ 0.8	0.9 ~ 1.6

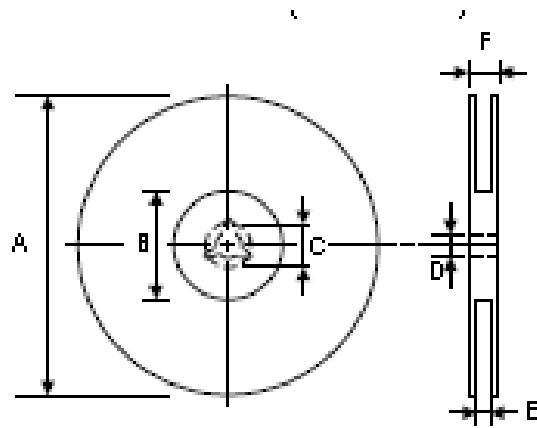
Packaging

Peel off force:

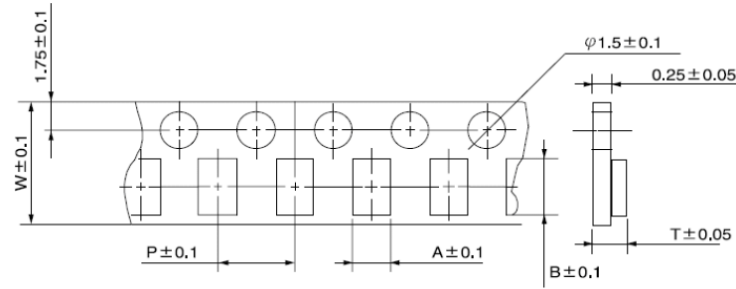


The force for peeling off cover tape is 10 grams in the direction shown

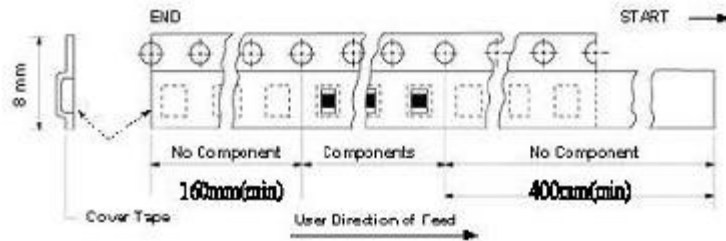
Dimensions (mm)



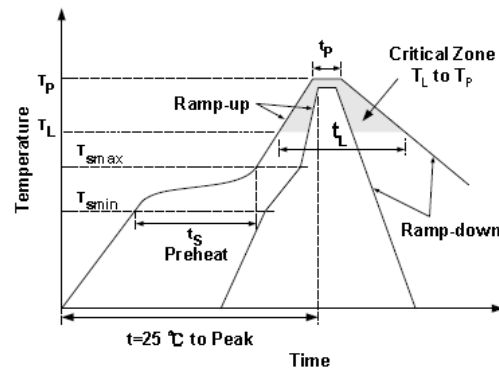
A	B	C	D	E	F
178 ±1	60 +0.5 -0.1	--	13 ±0.2	9 ±0.5	12 ±0.5



Size	A	B	W	P	T	Chips / Reel
0402	0.6	1.1	8	2	1.0	10000
0603	1.1	1.9	8	4	1.1	4000
0805	1.5	2.3	8	4	1.3	4000
1206	1.9	3.5	8	4	1.5	3000

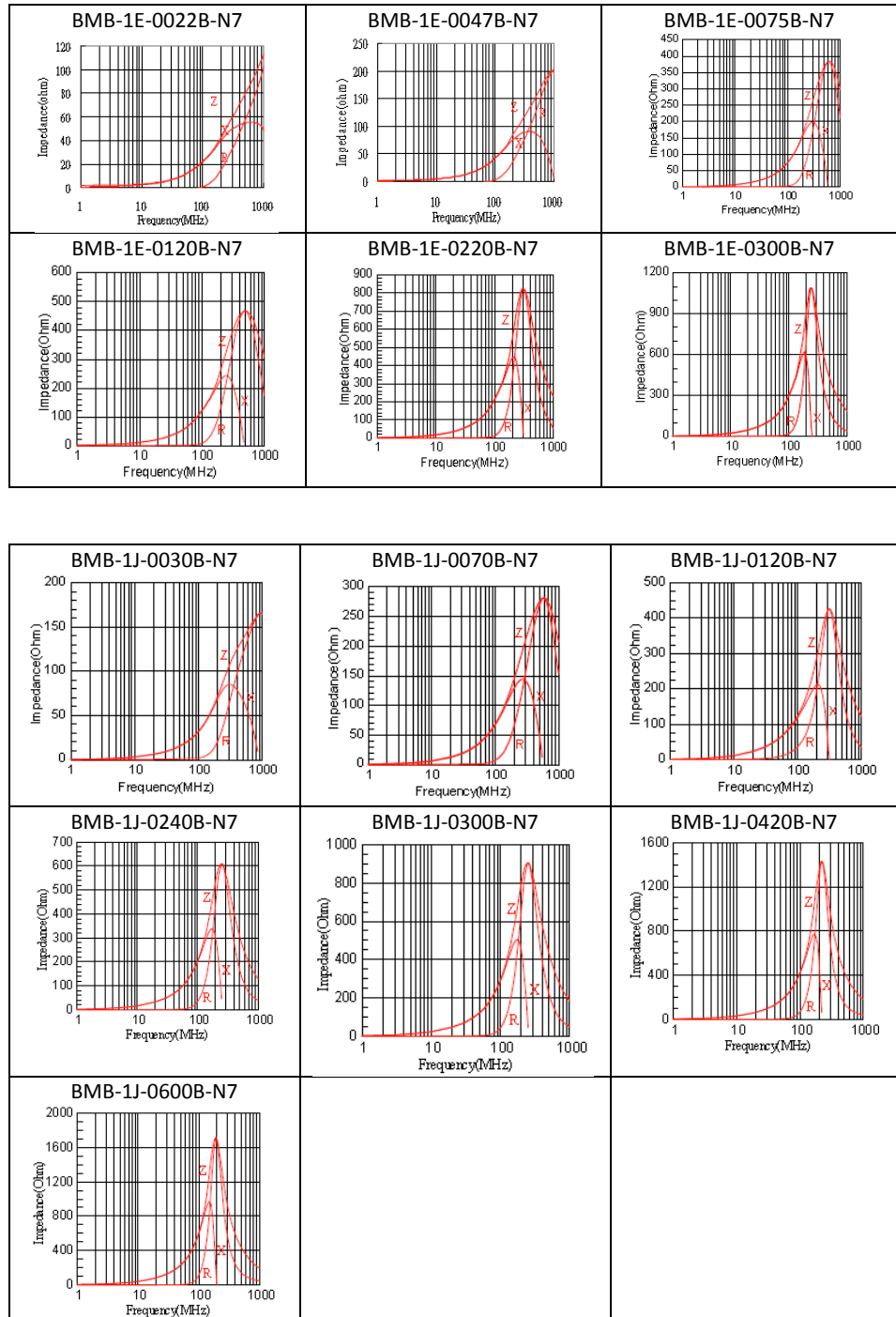


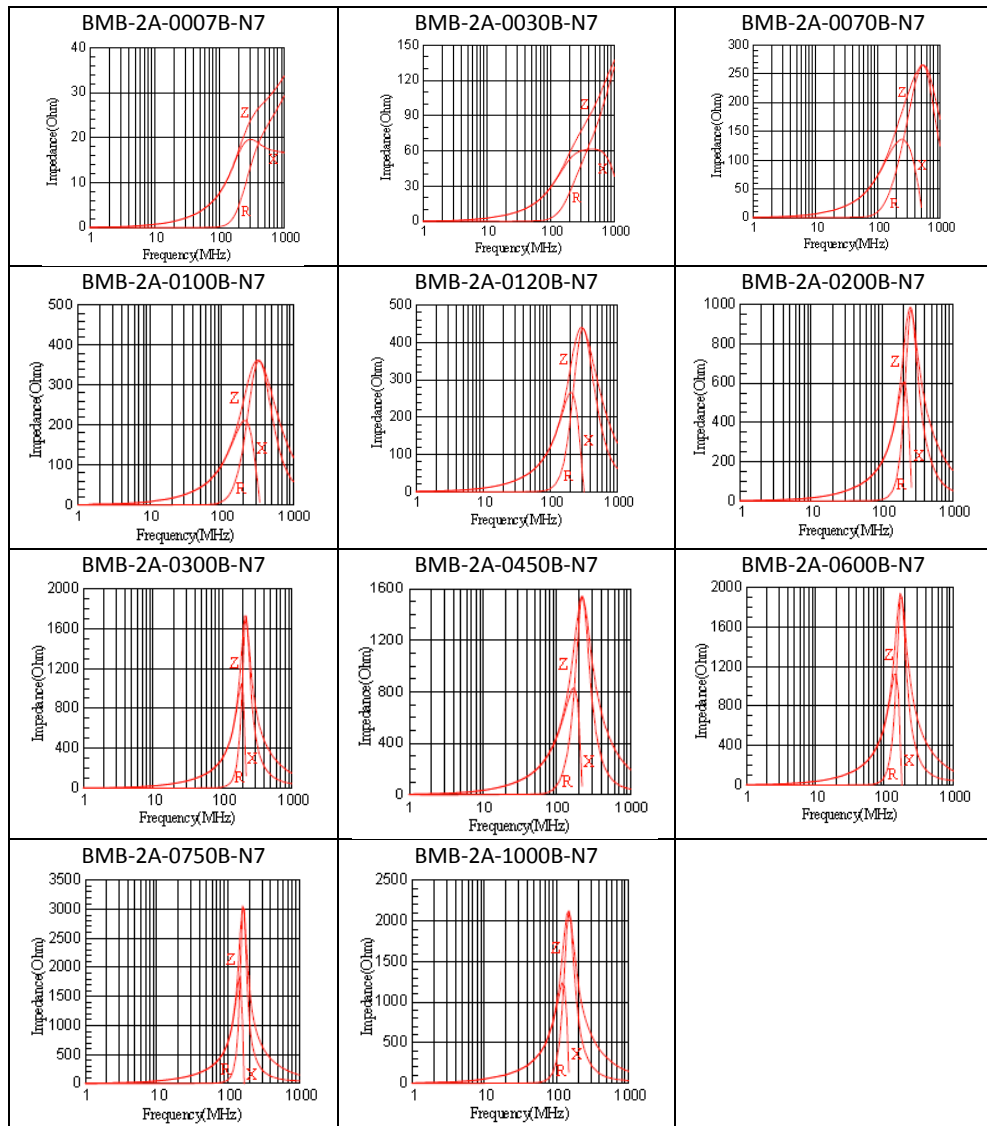
Recommended Reflow Solder Profile



Profile Feature		Pb Free
Preheat	ts	60 ~ 180 seconds
	Tsmin	150°C
	Tsmax	200°C
Average Ramp up rate (Tsmax to Tp)		3°C/second max.
Time main above	Temperature (TL)	217°C
	Time (tL)	60 ~ 150 seconds
Peak Temperature (Tp)		250 ~ 260°C
Time within 5°C of actual peak temperature ((tp)		10 seconds
Ramp down rate		6°C/second max.
Time 25°C to peak temperature		8 minutes max.

Typical Characteristic Curves (T=25°C)





Type BMB-L Series

Type BMB-L Series



The L series exhibits a low DC resistance across a wide range of impedance with a higher current capability than the A series. These are suitable for use on signal delay lines handling larger current and are available in 06:03 and 08:05 packages according to impedance requirements.

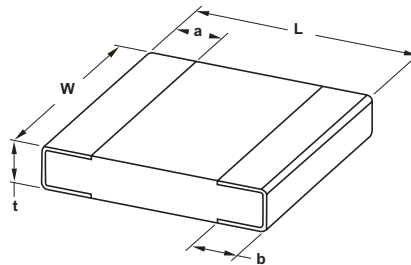
Key Features

- Low DC Resistance
- High Current Capability
- 0603 and 0805 Package Sizes
- Suited to Signal Delay Line Applications
- Designed for Telecommunications

Specifications

Package Size	Part Number	Impedance (ohms) at 100MHz (±25%)	DC Resistance (ohms) maximum	Rated Current (mA) maximum
0603	BMB-1J-0030L-N2	30	0.05	750
	BMB-1J-0060L-N2	60	0.10	650
	BMB-1J-0120L-N2	120	0.15	550
	BMB-1J-0300L-N2	300	0.25	500
	BMB-1J-0330L-N8	330		
	BMB-1J-0470L-N2	470	0.30	450
	BMB-1J-0600L-N2	600	0.35	350
	BMB-1J-1000L-N2	1000	0.40	300
0805	BMB-2A-0030L-N2	30	0.05	1000
	BMB-2A-0060L-N2	60		850
	BMB-2A-0120L-N2	120	0.10	700
	BMB-2A-0300L-N2	300	0.15	600
	BMB-2A-0470L-N2	470	0.20	500
	BMB-2A-0600L-N2	600	0.25	400
	BMB-2A-1000L-N2	1000	0.30	350
	BMB-2A-1500L-N2	1500	0.35	

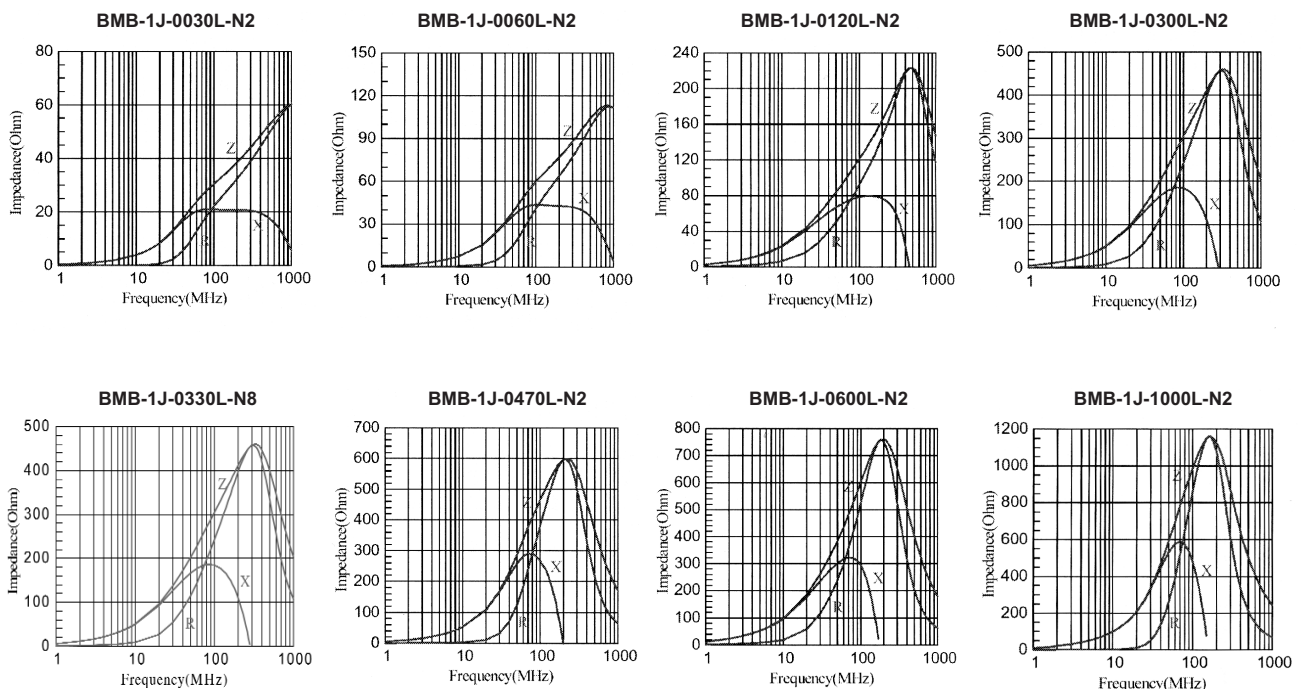
Chip Dimensions



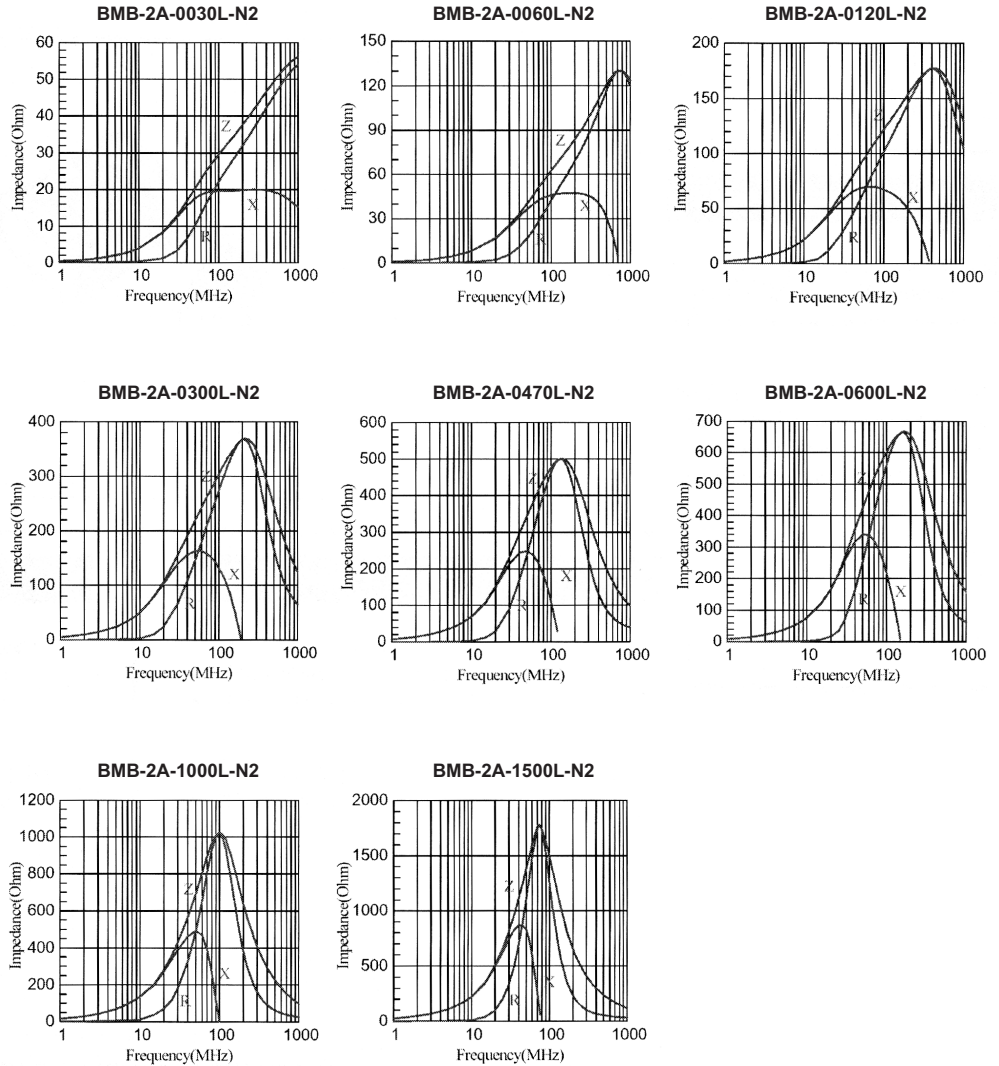
Size	L	W	t	a
0603	1.6 ±0.15	0.8 ±0.15	0.8 ±0.15	0.3 ±0.20
0805	2.0 ±0.20	1.2 ±0.20	0.9 ±0.20	0.5 ±0.30

Operating Temperature Range: -55°C to +125°C

Characteristic Curves



Characteristic Curves (continued)



Type BMB-R Series

Key Features

High
Impedance at
lower
frequency

Prevents
Signal ringing

Wide
Frequency
Characteristics

Suited to a
variety of
applications

Terminal finish
matte Sn over
Cu/Ni
underplate



The BMB R Series has been designed for low speed applications and specifically for use in Digital Sound circuitry and similar to prevent ringing. These chip devices have been designed to generate high impedances at low frequencies.

Due to market demand the R series is now only available in one value

Electrical Performance

Part Number	Impedance (Ω) at 100MHz	DC Resistance (Ω) maximum	Rated Current (mA) maximum
BMB-2A-0600R-S2	600 \pm 25%	0.35	200

Operating temperature range - -55 ~ +125°C

Temperature should be less than 25°C when rated current is applied.

Storage:

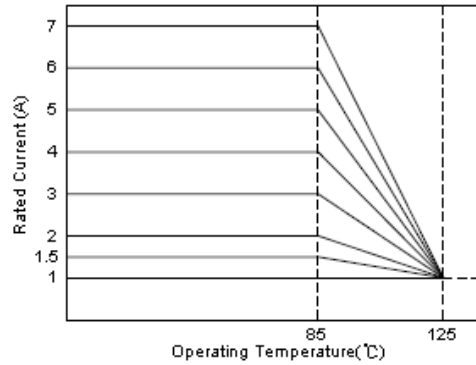
Temperature Range: -40 ~ +85°C

Humidity: Less than 75% RH

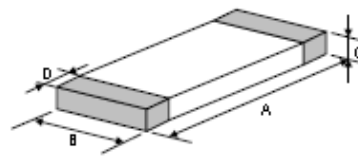
Current Derating

In operating temperatures exceeding +85°C derating of current is necessary for chip ferrite beads for which rated current is 1.5A or over.

Please apply the derating curve shown below according to the operating temperature

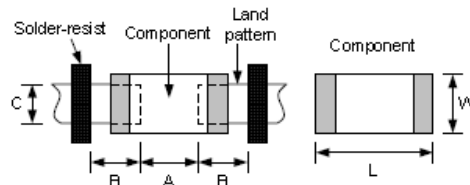


Product Dimensions



Size	A (mm)	B (mm)	C (mm)	D (mm)
0805	2.0 ±0.20	1.2 ±0.20	0.9 ±0.20	0.5 ±0.30

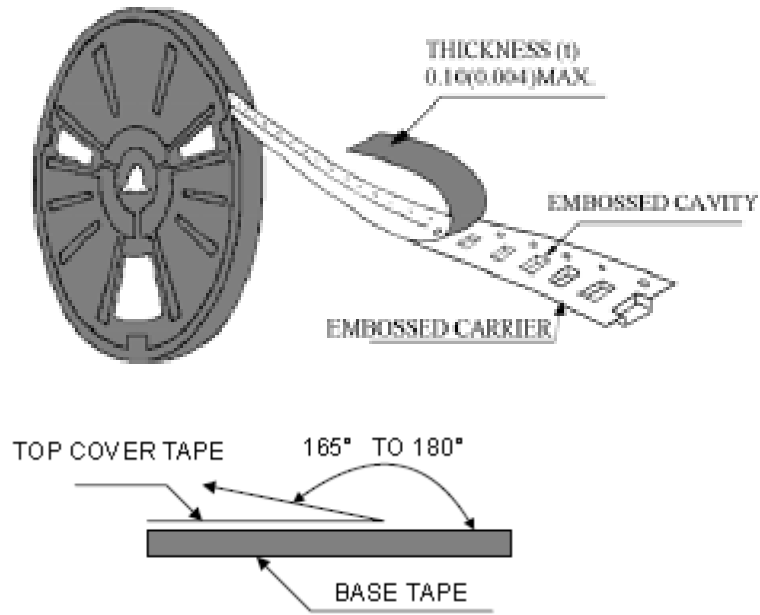
Recommended PCB Layout



Size	0805	
Component	L	2.0
	W	1.2
A	0.8 ~ 1.2	
B	0.8 ~ 1.2	
C	0.9 ~ 1.6	

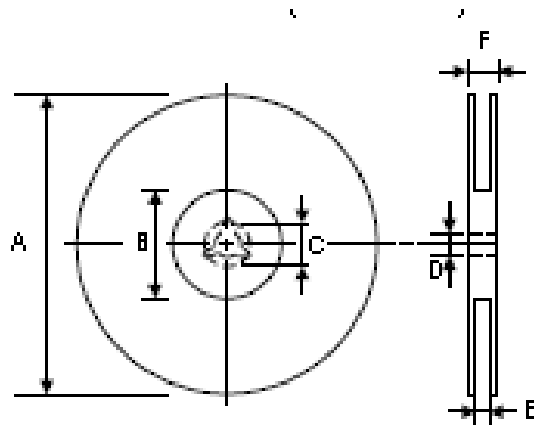
Packaging

Peel off force:

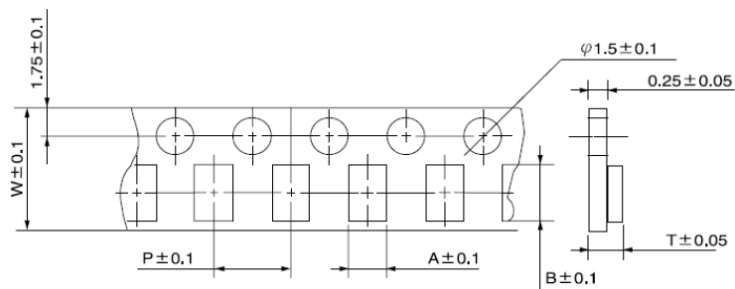


The force for peeling off cover tape is 10 grams in the direction shown

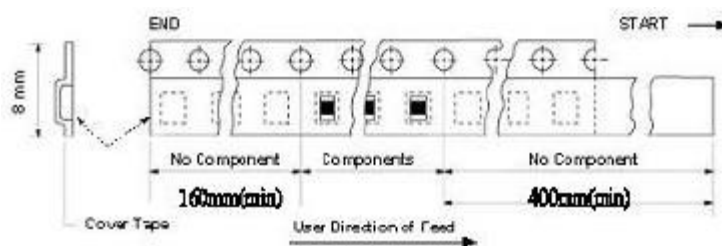
Dimensions (mm)



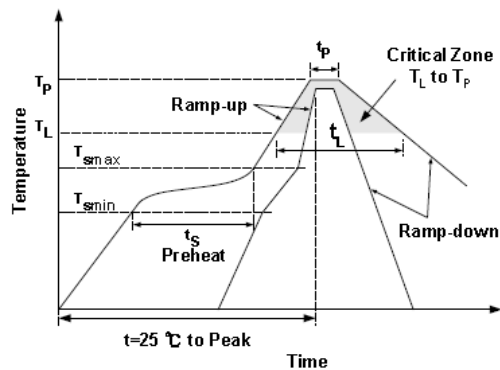
A	B	C	D	E	F
178 ±1	60 +0.5 -0.1	--	13 ±0.2	9 ±0.5	12 ±0.5



Size	A	B	W	P	T	Chips / Reel
0805	1.5	2.3	8	4	1.3	4000



Recommended Reflow Solder Profile



Profile Feature		Pb Free
Preheat	t_s	60 ~ 180 seconds
	T_{smin}	150°C
	T_{smax}	200°C
Average Ramp up rate (T_{smax} to T_p)		3°C/second max.
Time main above	Temperature (T_L)	217°C
	Time (t_L)	60 ~ 150 seconds
Peak Temperature (T_p)		250 ~ 260°C
Time within 5°C of actual peak temperature (t_p)		10 seconds
Ramp down rate		6°C/second max.
Time 25°C to peak temperature		8 minutes max.