

BPMI Series



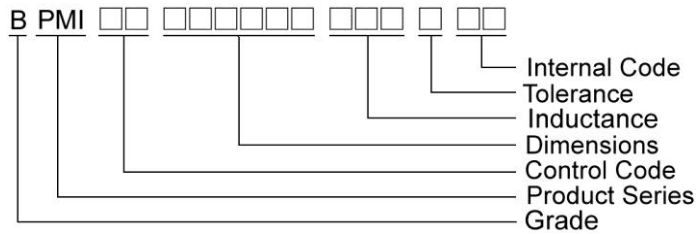
Features

- RoHS, Halogen Free and REACH Compliance
- Surface mount inductors designed for high speed, high current switch mode applications requiring lower inductance
- Gapped ferrite cores for maximum efficiency
Customized specifications are available

Applications

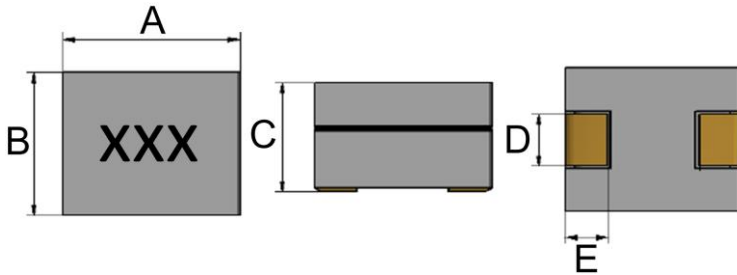
- Voltage regulator modules (VRMs) for servers, microprocessors
- High frequency, high current switching power supplies

Product Identification

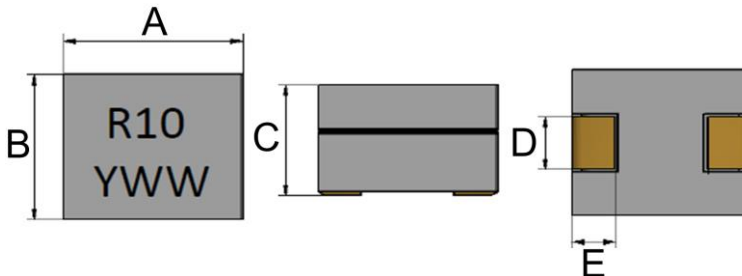


Shape and Dimensions

BPMI00040440-0J~0K



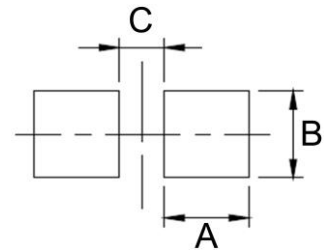
BPMI00040440-0H



Dimensions in mm

TYPE	Shape and Dimensions					Recommended Pattern		
	A	B	C	D	E	A	B	C
BPMI00040440	4.2Max	4.0Max	4.0Max	1.4	1.3	1.7	1.9	0.9
BPMI00040440-0H	4.0Max	4.0Max	4.0Max	1.4±0.2	1.0±0.2	1.7	1.9	0.9

Recommended Pattern

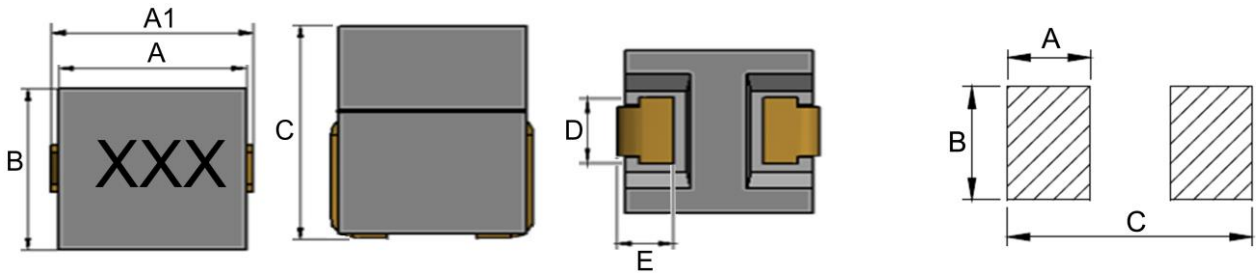


SMD Shielded Power Inductors – BPMI Series

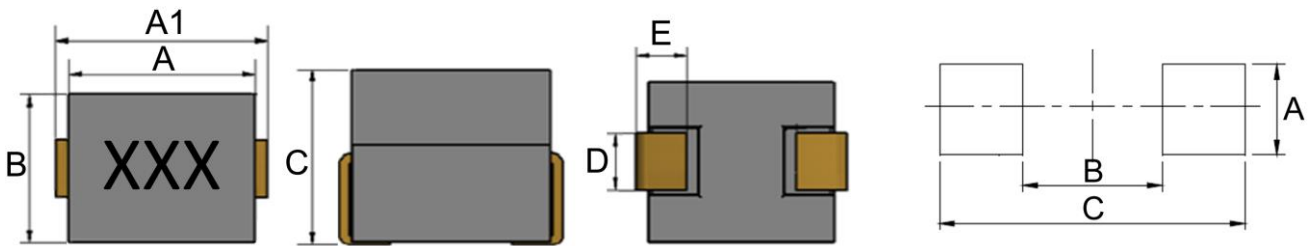
Shape and Dimensions

Recommended Pattern

BPMI00050566



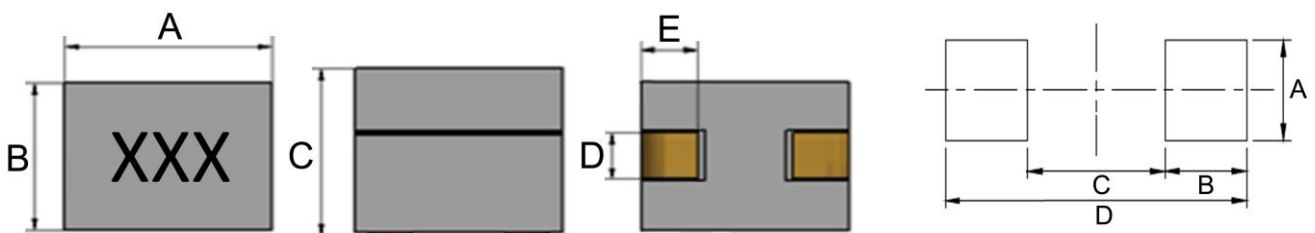
BPMI00060680



Dimensions in mm

TYPE	Shape and Dimensions						Recommended Pattern		
	A	A1	B	C	D	E	A	B	C
BPMI00050566	5.0Max	5.2Max	5.0Max	6.6Max	2	1.2	1.85	2.60	5.5
BPMI00060680-OE	5.7±0.5	7.0±0.5	5.7±0.5	8.0Max	3.0±0.2	1.35	3.50	2.20	8.0
BPMI00060680-OH	5.7±0.5	7.0±0.5	5.7±0.5	7.5±0.5	3.0±0.2	1.7±0.2	3.50	2.20	8.0

BPMI00070750/100865/100868/100874/110778



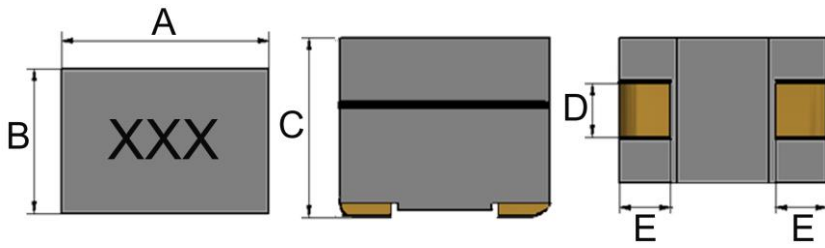
Dimensions in mm

TYPE	Shape and Dimensions					Recommended Pattern			
	A	B	C	D	E	A	B	C	D
BPMI00070750	7.0Max	7.0Max	4.96Max	2.49	1.52	3.05	2.03	3.3	7.36
BPMI00100865	10.41Max	8.0Max	6.5Max	2.24±0.25	2.54±0.25	2.79	3.05	4.32	10.42
BPMI00100868	10.2±0.2	7.8 ^{+0.2} _{-0.3}	6.8±0.2	2.24±0.15	2.54±0.12	2.50	3.30	4.7	11.3
BPMI00100874	10.31 ^{+0.1} _{-0.3}	7.65±0.25	7.4 ^{+0.1} _{-0.4}	2.21	2.54	3.05	3.30	4.57	11.17
BPMI00110778	11.0Max	7.2Max	7.8Max	1.55	2.54	2.54	3.56	4.06	11.18

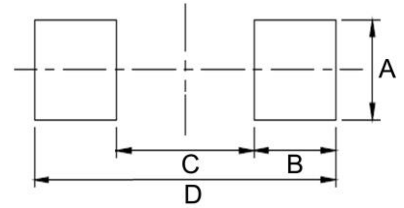
SMD Shielded Power Inductors – BPMI Series

Shape and Dimensions

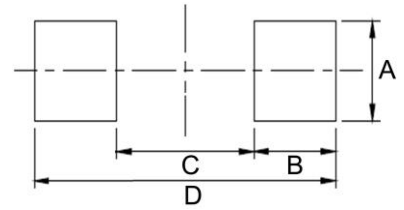
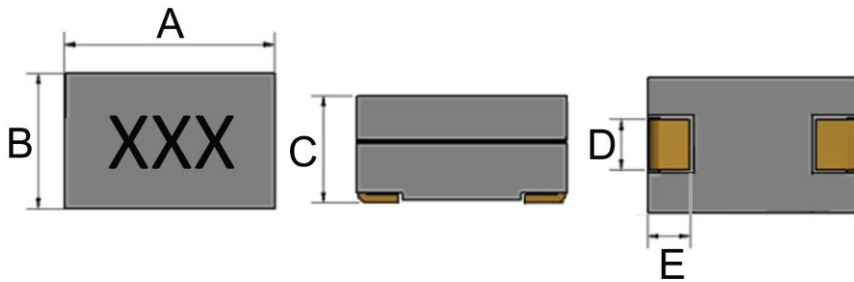
BPMI00090680



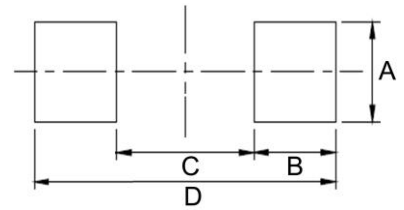
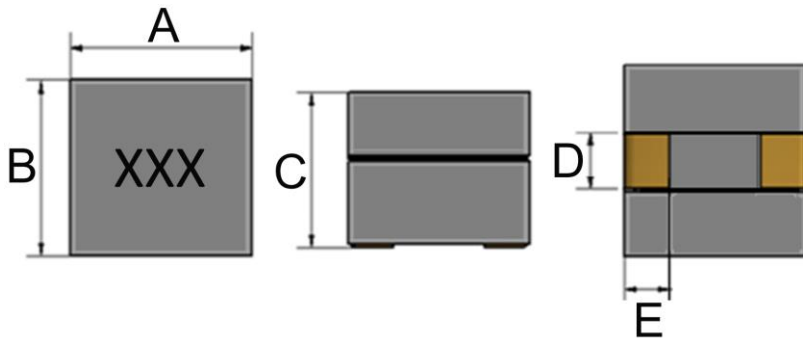
Recommended Pattern



BPMI00100750



BPMI00111190



Dimensions in mm

TYPE	Shape and Dimensions					Recommended Pattern			
	A	B	C	D	E	A	B	C	D
BPMI00090680	9.4±0.2	6.2±0.2	8Max	2.14±0.2	2.3±0.2	2.54	3.2	4.0	10.4
BPMI00100750	10.2Max	7.0Max	4.96Max	2.49	1.52	3.05	2.03	6.35	10.41
BPMI00111190	11.2Max	11.2Max	9.0Max	2.03	2.54	2.54	3.05	5.33	11.43

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)±9%	(A)Typ			I _{rms} (A)Typ	Marking
					Isat 1	Isat 2	Isat 3		
BPMI0004044022N□0J	0.022	20,30	100	0.23	60	58	55	28	22N
BPMI0004044065N□0K	0.065	15,20,30	100	0.32	25	-	-	19	65N
BPMI00040440R10□0H	0.10	15,20,30	100	0.32	17	-	12	19	R10YWW

Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat 1 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- Isat 2 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 75°C
- Isat 3 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp.100°C
- I_{rms} for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat 1 or I_{rms}

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	(A)Typ			I _{rms} (A)Typ	Marking
					Isat 1	Isat 2	Isat 3		
BPMI0005056650N□0E	0.05	15,20,30	100	0.47±20%	70	69	66	40	50N
BPMI0005056650N□0F	0.05	15,20,30	100	0.27±7%	72	-	66	53	50N
BPMI00050566R10□0E	0.10	20,30	100	0.47±20%	35	32	29	40	R10
BPMI00050566R11□0E	0.11	20,30	100	0.27±7%	31	28	25	53	R11

Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat 1 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- Isat 2 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 45°C
- Isat 3 : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp.100°C
- I_{rms} for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat 1 or I_{rms}

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI0006068032N□0E	0.032	10,15,20,30	100	0.23±10%	125	50	32N
BPMI00060680R10□0H	0.10	15,20,30	100	0.23±7%	40	35	R10
BPMI00060680R20□0H	0.20	15,20,30	100	0.23±7%	22	35	R20

Note: When ordering, please specify tolerance code. Tolerance: K=±10% , L=±15% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C (For 0.032~0.1uH)
- Isat : Based on inductance change (L(uH) : 0.1uH Min)@ ambient temp. 25°C (For 0.20uH)
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI0007075072N□00	0.072	10,20,30	100	0.32±9.4%	58	31	72N
BPMI00070750R10□00	0.10	10,20,30	100	0.32±9.4%	46	31	R10
BPMI00070750R11□00	0.11	20,30	100	0.32±9.4%	46	31	R11
BPMI00070750R12□00	0.12	10,20,30	100	0.32±9.4%	38	31	R12
BPMI00070750R15□00	0.15	10,20,30	100	0.32±9.4%	30	31	R15
BPMI00070750R18□00	0.18	10,20,30	100	0.32±9.4%	25	31	R18
BPMI00070750R22□00	0.22	10,20,30	100	0.32±9.4%	20	31	R22

Note: When ordering, please specify tolerance code. Tolerance: K=±10% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/Lo$: drop 20% Typ.)@ ambient temp. 25°C
- I rms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or I rms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Max	Marking
BPMI00090680R10□00	0.10	10,15,20	100	0.29±5%	95	51	R10
BPMI00090680R12□00	0.12	10,15,20	100	0.29±5%	80	51	R12
BPMI00090680R15□00	0.15	10,15,20	100	0.29±5%	65	51	R15
BPMI00090680R18□00	0.18	10,15,20	100	0.29±5%	54	51	R18
BPMI00090680R22□00	0.22	10,15,20	100	0.29±5%	44	51	R22
BPMI00090680R28□00	0.28	10,15,20	100	0.29±5%	34	51	R28
BPMI00090680R30□00	0.30	10,15,20	100	0.29±5%	32.5	51	R30

Note: When ordering, please specify tolerance code. Tolerance: K=±10% , L=±15% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI0010075085N□00	0.085	20,30	100	0.39±7.7%	>70	31	85N
BPMI00100750R10□00	0.10	15,20	100	0.39±7.7%	70	31	R10
BPMI00100750R12□00	0.12	15,20	100	0.39±7.7%	52	31	R12
BPMI00100750R15□00	0.15	15,20	100	0.39±7.7%	40	31	R15
BPMI00100750R16□00	0.155	15,20	100	0.39±7.7%	40	31	R155
BPMI00100750R20□00	0.20	15,20	100	0.39±7.7%	33	31	R20
BPMI00100750R22□00	0.22	15,20	100	0.39±7.7%	33	25	R22

Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/Lo$: drop 20% Typ.)@ ambient temp. 25°C
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI00100865R12□00	0.12	15,20	100	0.48±8%	74	40	R12
BPMI00100865R14□00	0.14	15,20	100	0.48±8%	66	40	R14
BPMI00100865R18□00	0.18	15,20	100	0.48±8%	52	40	R18
BPMI00100865R22□00	0.215	15,20	100	0.48±8%	50	40	R215
BPMI00100865R30□00	0.30	15,20	100	0.48±8%	30	40	R30
BPMI00100865R60□00	0.60	15,20	100	0.48±8%	12	40	R60

Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- I rms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or I rms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI00100868R12□0E	0.12	10,15,20	100	0.29±7%	80	54	R12
BPMI00100868R12□0F	0.12	10,15,20	100	0.29±5%	80	54	R12
BPMI00100868R14□0E	0.14	10,15,20	100	0.29±7%	72	54	R14
BPMI00100868R14□0F	0.14	10,15,20	100	0.29±5%	72	54	R14
BPMI00100868R17□0E	0.17	10,15,20	100	0.29±7%	58	54	R17
BPMI00100868R17□0F	0.17	10,15,20	100	0.29±5%	58	54	R17
BPMI00100868R18□0E	0.18	10,15,20	100	0.29±7%	56	54	R18
BPMI00100868R18□0F	0.18	10,15,20	100	0.29±5%	56	54	R18
BPMI00100868R22□0E	0.22	10,15,20	100	0.29±7%	50	54	R22
BPMI00100868R22□0F	0.22	10,15,20	100	0.29±5%	50	54	R22
BPMI00100868R30□0E	0.30	10,15,20	100	0.29±7%	32	54	R30
BPMI00100868R30□0F	0.30	10,15,20	100	0.29±5%	32	54	R30

Note: When ordering, please specify tolerance code. Tolerance: K=±10% , L=±15% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI00100874R12□00	0.115	15,20	100	0.29±10%	94	41	R115
BPMI00100874R13□00	0.13	15,20	100	0.29±10%	85	41	R13
BPMI00100874R15□00	0.15	15,20	100	0.29±10%	72	41	R15
BPMI00100874R17□00	0.17	15,20	100	0.29±10%	62	41	R17
BPMI00100874R18□00	0.175	15,20	100	0.29±10%	62	41	R175
BPMI00100874R22□00	0.215	15,20	100	0.29±10%	48	41	R215
BPMI00100874R23□00	0.23	15,20	100	0.29±10%	43	41	R23
BPMI00100874R27□00	0.27	15,20	100	0.29±10%	37	41	R27
BPMI00100874R30□00	0.30	15,20	100	0.29±10%	32	41	R30

Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- I rms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or I rms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI0011077870N□00	0.07	15,20	100	0.29±10%	>70	48	70N
BPMI00110778R10□00	0.10	15,20	100	0.29±10%	>70	48	R10
BPMI00110778R12□00	0.12	15,20	100	0.29±10%	>70	48	R12
BPMI00110778R15□00	0.15	15,20	100	0.29±10%	70	48	R15
BPMI00110778R18□00	0.18	15,20	100	0.29±10%	55	48	R18
BPMI00110778R22□00	0.22	15,20	100	0.29±10%	47	48	R22
BPMI00110778R23□00	0.23	15,20	100	0.29±10%	44	48	R23
BPMI00110778R30□00	0.30	15,20	100	0.29±10%	32	48	R30
BPMI00110778R40□00	0.40	15,20	100	0.29±10%	23	48	R40
BPMI00110778R47□00	0.47	15,20	100	0.29±10%	17	48	R47
BPMI00110778R50□00	0.50	15,20	100	0.29±10%	17	48	R50
BPMI00110778R51□00	0.51	15,20	100	0.29±10%	17	48	R51

Note: When ordering, please specify tolerance code. Tolerance: K=±10% , L=±15% , M=±20%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/Lo$: drop 20% Typ.)@ ambient temp. 25°C
- Irms for a 50°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

SMD Shielded Power Inductors – BPMI Series

Standard Specifications

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	Isat (A)Typ	Irms (A)Typ	Marking
BPMI00111190R22□00	0.225	15,20,30	100	0.63±9.5%	68	35	R22
BPMI00111190R25□00	0.25	15,20,30	100	0.63±9.5%	63	35	R25
BPMI00111190R27□00	0.27	15,20,30	100	0.63±9.5%	50	35	R27
BPMI00111190R32□00	0.325	15,20,30	100	0.63±9.5%	43	35	R32
BPMI00111190R47□00	0.47	15,20,30	100	0.63±9.5%	30	35	R47

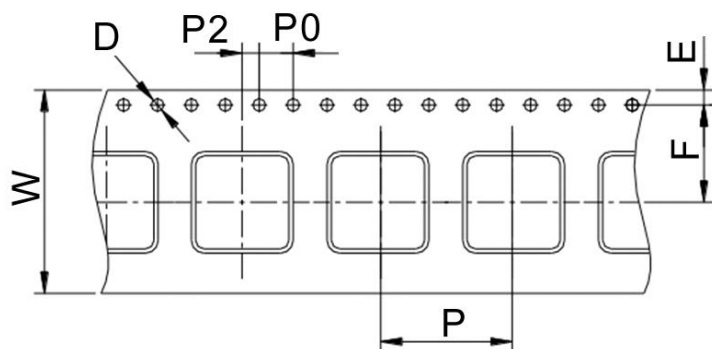
Note: When ordering, please specify tolerance code. Tolerance: L=±15% , M=±20% , T=±30%

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat : Based on inductance change ($\Delta L/L_0$: drop 20% Typ.)@ ambient temp. 25°C
- Irms for a 40°C temperature rise from 25°C ambient with current
- Rated DC Current : The less value which is Isat or Irms

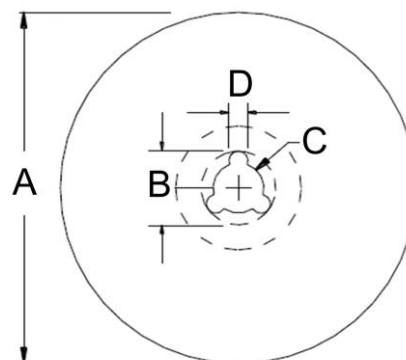
SMD Shielded Power Inductors – BPMI Series

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions							Reel Dimensions				Quantity PCS / Reel
	W	D	E	F	P	P0	P2	A	B	C	D	
BPMI00040440	12	1.5	1.75	5.5	8	4	2	330	20	13	2	2000
BPMI00040440-0H	12	1.5	1.75	5.5	8	4	2	330	20	13	2	1800
BPMI00050566	16	1.5	1.75	7.5	12	4	2	330	20	13	2	750
BPMI00060680	16	1.5	1.75	7.5	12	4	2	330	20	13	2	700
BPMI00070750	16	1.5	1.75	7.5	12	4	2	330	20	13	2	1000
BPMI00090680	24	1.5	1.75	11.5	12	4	2	330	20	13	2	500
BPMI00100750	24	1.5	1.75	11.5	12	4	2	330	20	13	2	800
BPMI00100865	24	1.5	1.75	11.5	12	4	2	330	20	13	2	500
BPMI00100868	24	1.5	1.75	11.5	12	4	2	330	20	13	2	500
BPMI00100874	24	1.5	1.75	11.5	12	4	2	330	20	13	2	500
BPMI00110778	24	1.5	1.75	11.5	12	4	2	330	20	13	2	500
BPMI00111190	24	1.5	1.75	11.5	16	4	2	330	20	13	2	500