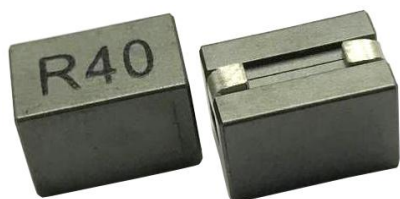


BPSV Series



High current carrying capacity, Low core losses, Controlled DCR tolerance for sensing circuits Integral design, good product reliability

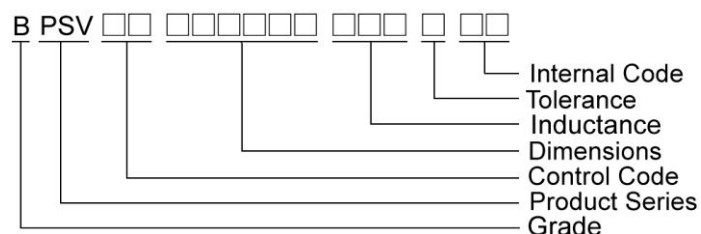
Features

- High Current, High Frequency, low DCR

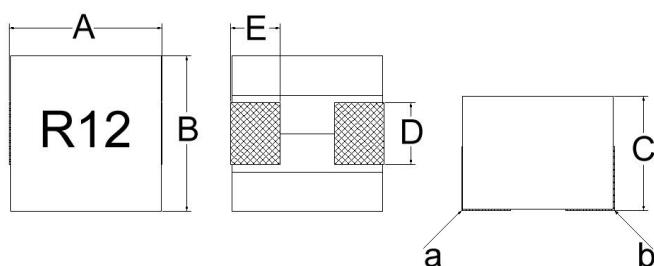
Applications

- Desktop
- Server
- Power System

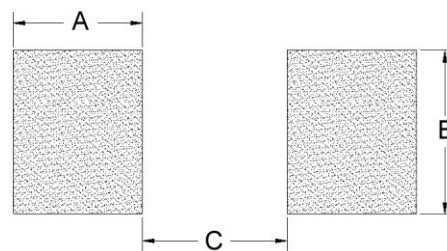
Product Identification



Shape and Dimensions



Recommended Pattern



Dimensions in mm

TYPE	Shape and Dimensions					Recommended Pattern		
	A	B	C	D	E	A	B	C
BPSV00040430	4.0Max	4.0Max	3.0Max	1.00±0.20	1.20±0.20	1.7	1.5	0.9
BPSV00040440	4.0Max	4.0Max	4.0Max	1.00±0.20	1.20±0.20	1.7	1.5	0.9
BPSV00070750	7.0Max	7.0Max	4.96Max	2.49±0.25	1.52±0.25	2.03	3.05	3.3
BPSV00100750	10.2Max	7.0Max	4.95Max	2.55±0.20	1.52±0.20	3.0	2.5	4.7
BPSV00100873	10.2±0.2	7.8 _{+0.2} ^{-0.3}	7.3±0.2	1.90±0.15	2.54±0.20	3.0	2.5	4.7
BPSV00110775	11.0Max	7.2Max	7.5Max	1.90±0.15	2.50±0.20	3.1	2.5	5.0

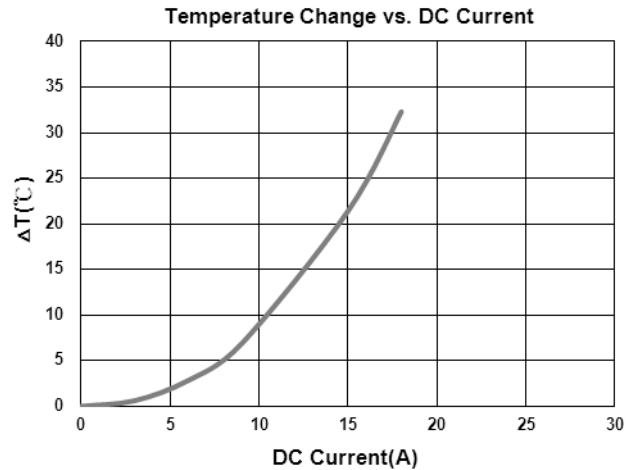
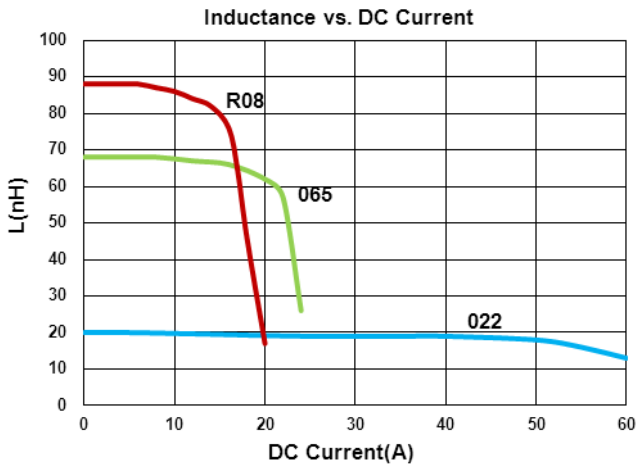
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00040430022M00	22	20	1MHz	0.32±15%	15	40	19	A
BPSV00040430065L00	65	15	100kHz	0.32±25%	44	22	19	B
BPSV00040430R08L00	80	15	100kHz	0.32±25%	54	18	19	C

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
- I rms for a 40°C temprature rise from 25°C ambient.
- RDC test data is referenced to 25°C ambient
- Isat is the DC current which cause the inductance drop to L1
- Measure Equipment :
L : WK3260B+WK3265B
RDC : Chroma 16502
Isat : WK3260B+WK3265B



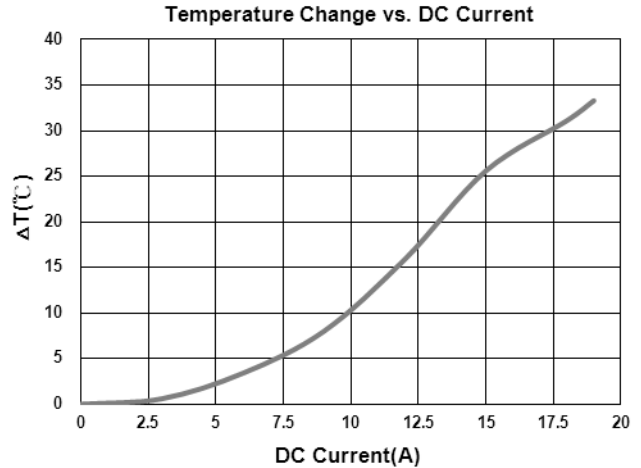
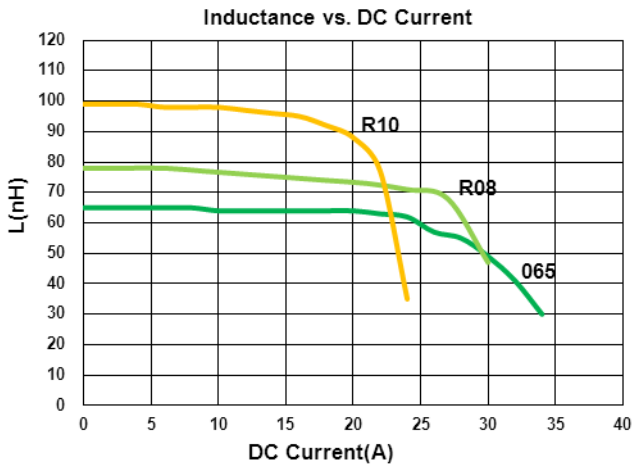
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00040440065L00	65	15	100	0.32±25%	44	24	19	B
BPSV00040440R08L00	80	15	100	0.32±15%	54	20	19	C
BPSV00040440R10L00	100	15	100	0.32±15%	68	16	19	D

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
- I rms for a 40°C temprature rise from 25°C ambient.
- RDC test data is referenced to 25°C ambient
- Isat is the DC current which cause the inductance drop to L1
- Measure Equipment :
L : WK3260B+WK3265B
RDC : Chroma 16502
Isat : WK3260B+WK3265B



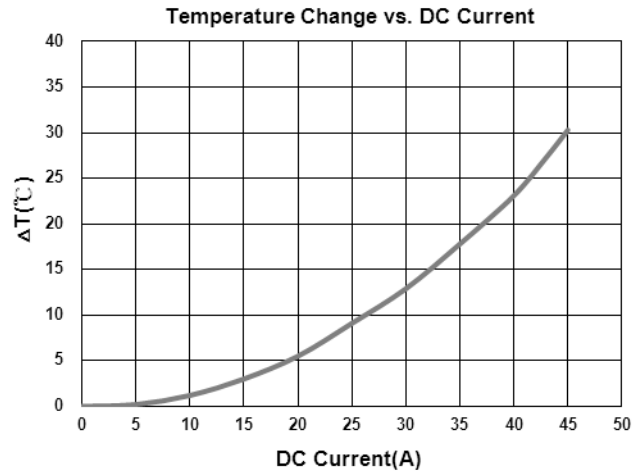
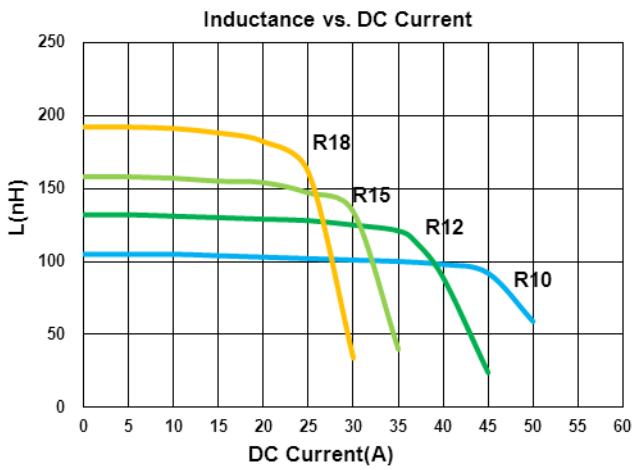
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00070750R10K00	100	10	100	0.25±10%	75	44	43	R10
BPSV00070750R12K00	120	10	100	0.25±10%	86	37	43	R12
BPSV00070750R15K00	150	10	100	0.25±10%	108	30	43	R15
BPSV00070750R18K00	180	10	100	0.25±10%	130	25	43	R18

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
- I rms for a 40°C temperature rise from 25°C ambient.
- RDC test data is referenced to 25°C ambient
- Isat is the DC current which cause the inductance drop to L1
- Measure Equipment :
L : WK3260B+WK3265B
RDC : Chroma 16502
Isat : WK3260B+WK3265B



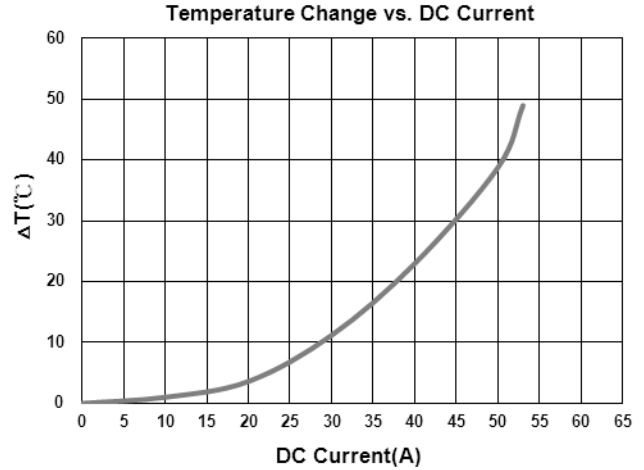
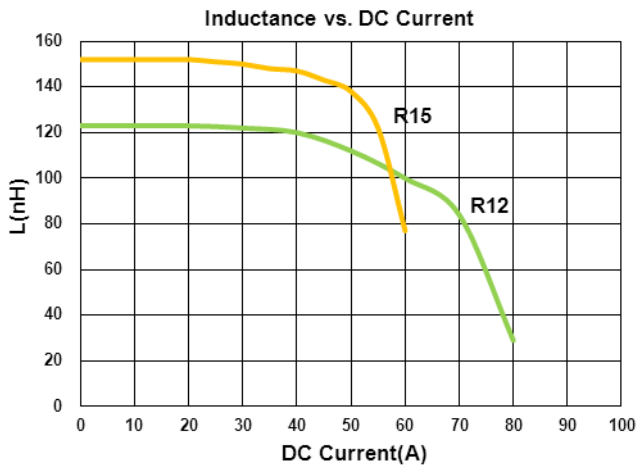
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00100750R08K00	85	10	100	0.39±7.7%	61	90	53	R08
BPSV00100750R10K00	100	10	100	0.39±7.7%	72	73	53	R10
BPSV00100750R12K00	120	10	100	0.39±7.7%	86	60	53	R12
BPSV00100750R15K00	150	10	100	0.39±7.7%	108	47	53	R15

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
- Irms for a 40°C temperature rise from 25°C ambient.
- RDC test data is referenced to 25°C ambient
- Isat is the DC current which cause the inductance drop to L1
- Measure Equipment :
L : WK3260B+WK3265B
RDC : Chroma 16502
Isat : WK3260B+WK3265B



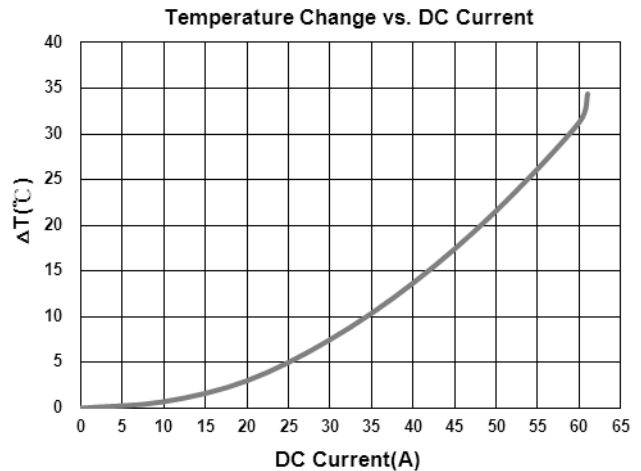
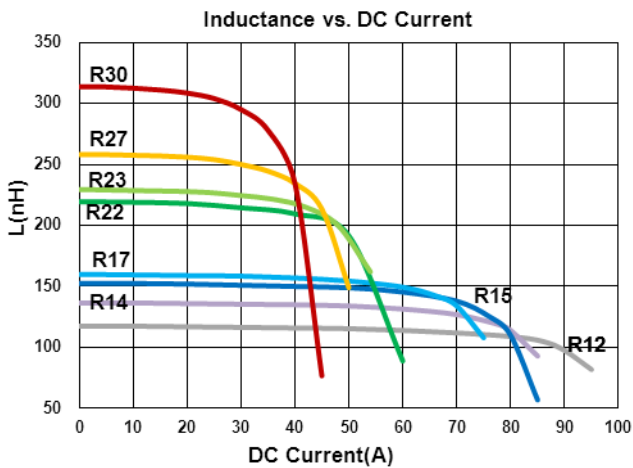
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00100873R12K00	120	10	100	0.29±5%	86	94	61	R12
BPSV00100873R14K00	140	10	100	0.29±5%	100	72	61	R14
BPSV00100873R15K00	150	10	100	0.29±5%	108	76	61	R15
BPSV00100873R17K00	170	10	100	0.29±5%	122	66	61	R17
BPSV00100873R22K00	215	10	100	0.29±5%	155	50	61	R22
BPSV00100873R23K00	230	10	100	0.29±5%	165	48	61	R23
BPSV00100873R27K00	270	10	100	0.29±5%	194	40	61	R27
BPSV00100873R30K00	300	10	100	0.29±5%	216	35	61	R30

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

- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
- I rms for a 40°C temperature rise from 25°C ambient.
- RDC test data is referenced to 25°C ambient
- Isat is the DC current which cause the inductance drop to L1
- Measure Equipment :
 L : WK3260B+WK3265B
 RDC : Chroma 16502
 Isat : WK3260B+WK3265B



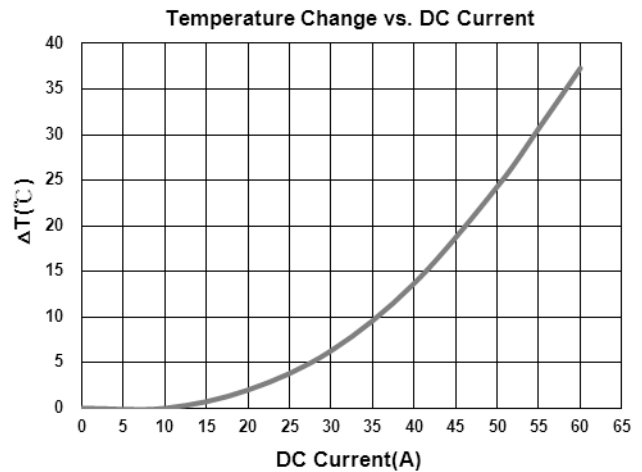
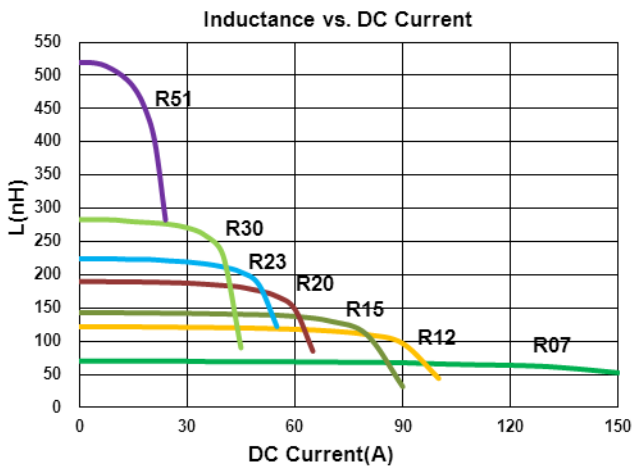
SMD Power Inductors – BPSV Series

Electrical Characteristics

Part Number	Inductance (nH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ)	L1@Isat (nH)Min	Isat (A) Typ	Irms (A) Typ	Marking
BPSV00110775R07K00	70	10	100	0.29±10%	50	140	55	R07
BPSV00110775R12K00	120	10	100	0.29±10%	86	90	55	R12
BPSV00110775R15K00	150	10	100	0.29±10%	108	70	55	R15
BPSV00110775R20K00	200	10	100	0.29±10%	166	45	55	R20
BPSV00110775R23K00	230	10	100	0.29±10%	166	45	55	R23
BPSV00110775R30K00	300	10	100	0.29±10%	217	35	55	R30
BPSV00110775R40K00	400	10	100	0.29±10%	288	25	55	R40
BPSV00110775R51K00	510	10	100	0.29±10%	364	18	55	R51

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

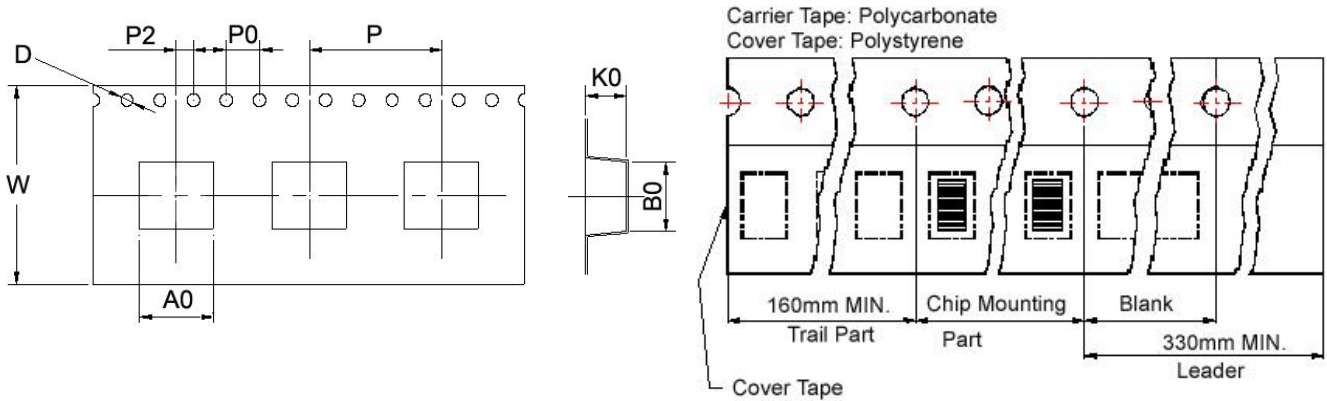
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- Isat for Inductance drop 20% from its value without current at 25°C
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RDC : Chroma 16502
Isat : WK3260B+WK3265B



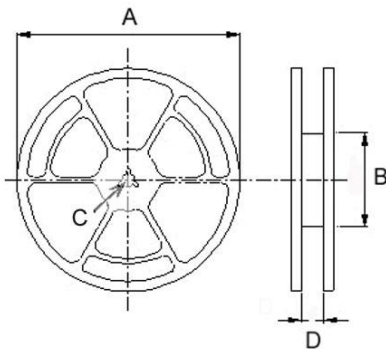
SMD Power Inductors – BPSV Series

Packaging Specifications

Tape Dimensions



Reel Dimensions



Dimensions in mm

TYPE	Tape Dimensions								Reel Dimensions				Quantity PCS / REEL
	A0	B0	K0	D	W	P	P0	P2	A	B	C	D	
BPSV00040430	4.20	4.15	3.50	1.5	12	8	4	2	330	100	13	13.4	2500
BPSV00040440	4.20	4.15	4.50	1.5	12	8	4	2	330	100	13	13.4	1800
BPSV00070750	7.20	7.2	5.10	1.5	16	12	4	2	330	100	13	16.0	1000
BPSV00100750	7.30	10.6	5.30	1.5	24	12	4	2	330	100	13	24.4	1000
BPSV00100873	8.20	10.6	7.70	1.5	24	12	4	2	330	100	13	24.4	700
BPSV00110775	7.25	11.5	7.85	1.5	24	12	4	2	330	100	13	24.4	640