

## BPSx Series

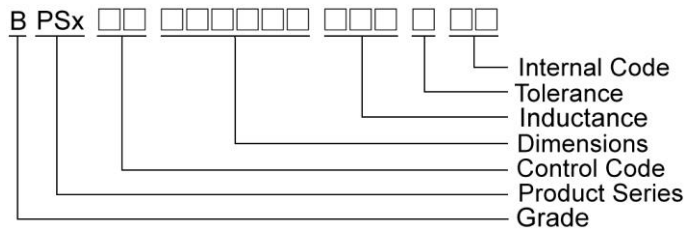
### Features

- 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

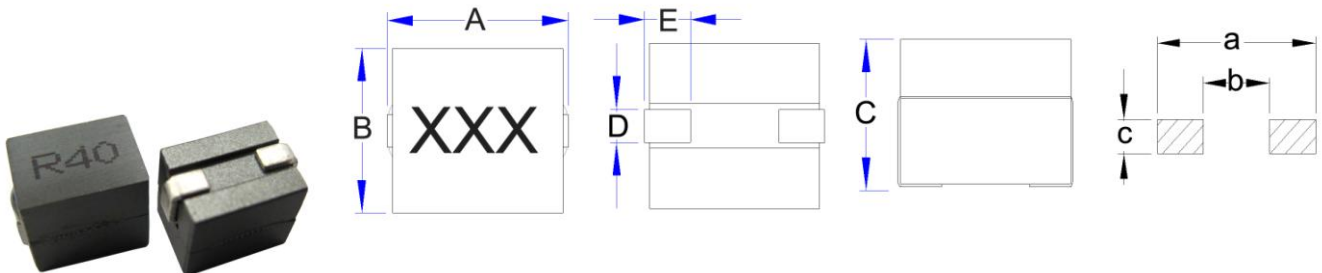
### Applications

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

### Product Identification



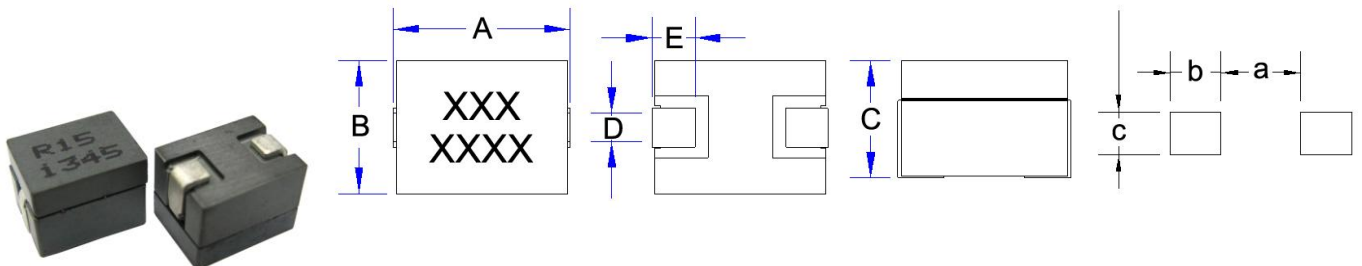
### Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E	a	b	c
BPSG00110870	11.0 Max	7.5 Max	7.0 Max	1.6±0.2	2.6±0.3	11.0	4.3	2

### Shape and Dimensions



Dimensions in mm

TYPE	A	B	C	D	E	a	b	c
BPSW00100873	10.2±0.2	8.0 Max	7.3±0.2	2.2±0.2	2.54±0.5	4.7	3.0	2.5

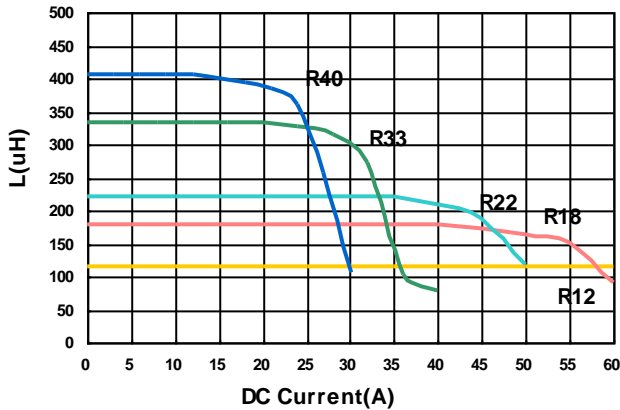
## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ) ±7%	Isat (A) Max	Irms (A) Max
BPSG00110870R12L00	0.12	15	100	0.37	85	37
BPSG00110870R15L00	0.15	15	100	0.37	75	37
BPSG00110870R18L00	0.18	15	100	0.37	50	37
BPSG00110870R22L00	0.22	15	100	0.37	40	37
BPSG00110870R33L00	0.33	15	100	0.37	28	37
BPSG00110870R40L00	0.40	15	100	0.37	21	37

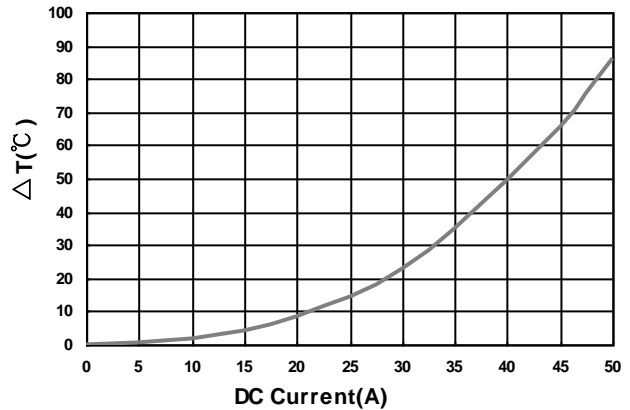
**Note: When ordering, please specify tolerance code. Tolerance: L=±15%**

- Customized Specifications are available
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- OCL (Open Circuit Inductance) Test parameters: 100kHz, 0.25Vrms, 0Adc & Isat @20°C
- DC current for an approximate  $\Delta T$  of 40°C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, airflow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 155°C under worst case operating conditions verified in the end application.
- Measure Equipment :  
 L : WK3260B+WK3265B  
 RDC : Chroma 16502  
 Isat : WK3260B+WK3265B

**Inductance vs. DC Current**



**Temperature Change vs. DC Current**



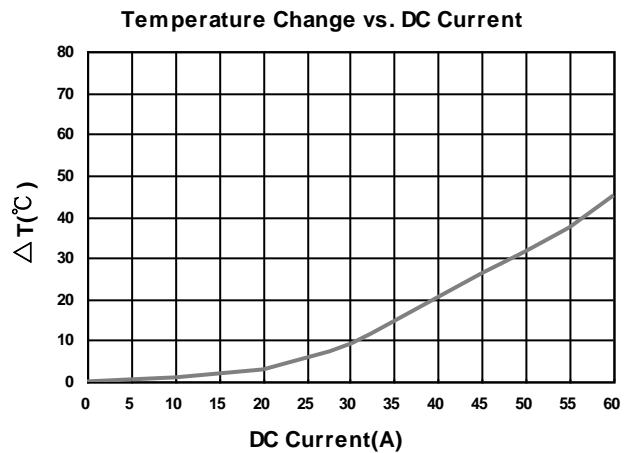
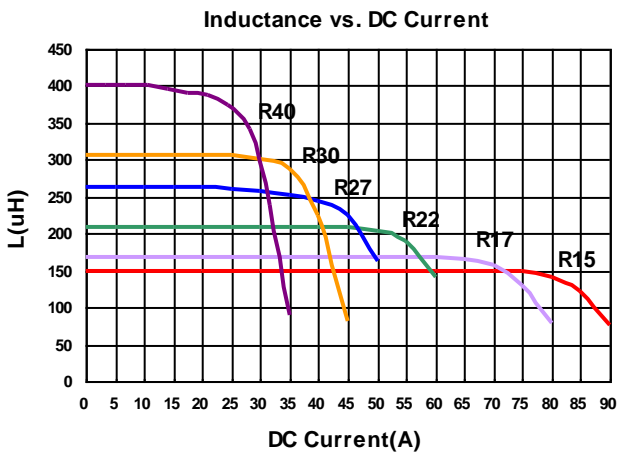
# SMD Power Inductors – BPSG/BPSW Series

## Electrical Characteristics

Part Number	Inductance (uH)	Tolerance (±%)	Test Frequency (kHz)	RDC (mΩ) ±6%	Isat (A) Max	Irms (A) Max
BPSW00100873R15K00	0.15	10	100	0.29	76	56
BPSW00100873R17K00	0.17	10	100	0.29	66	56
BPSW00100873R22K00	0.215	10	100	0.29	50	56
BPSW00100873R27K00	0.27	10	100	0.29	40	56
BPSW00100873R30K00	0.30	10	100	0.29	35	56
BPSW00100873R40L00	0.40	15	100	0.29	25	56

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

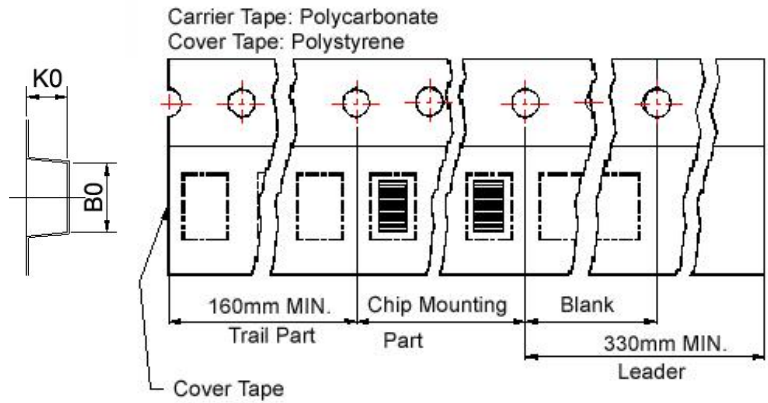
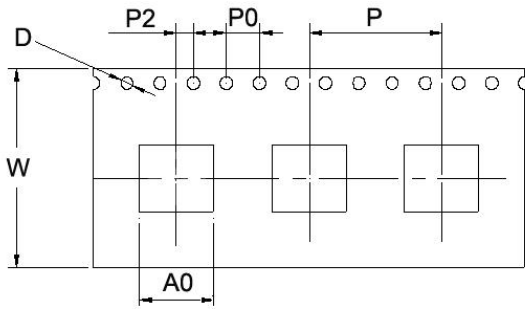
- Customized Specifications are available
- Operating temperature range - 40°C ~ 125°C(Including self - temperature rise)
- OCL (Open Circuit Inductance) Test parameters: 100kHz, 0.25Vrms, 0Adc & Isat @20°C
- DC current for an approximate Δ T of 40°C without core loss. Derating is necessary for AC currents. PCB layout, trace thickness and width, airflow, and proximity of other heat generating components will affect the temperature rise. It is recommended that the temperature of the part not exceed 155°C under worst case operating conditions verified in the end application.
- Measure Equipment :  
 L : WK3260B+WK3265B  
 RDC : Chroma 16502  
 Isat : WK3260B+WK3265B



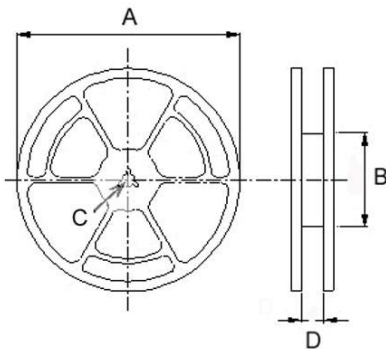
# SMD Power Inductors – BPSG/BPSW Series

## 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	
BPSG00110870	7.4	10.6	7.6	1.5	24	12	4	2	330	100	13.5	24	640
BPSW00100873	8.0	10.8	7.7	1.5	24	12	4	2	330	100	13.5	24	700