PWPG SERIES HIGH CURRENT POWER INDUCTOR 大电流功率电感

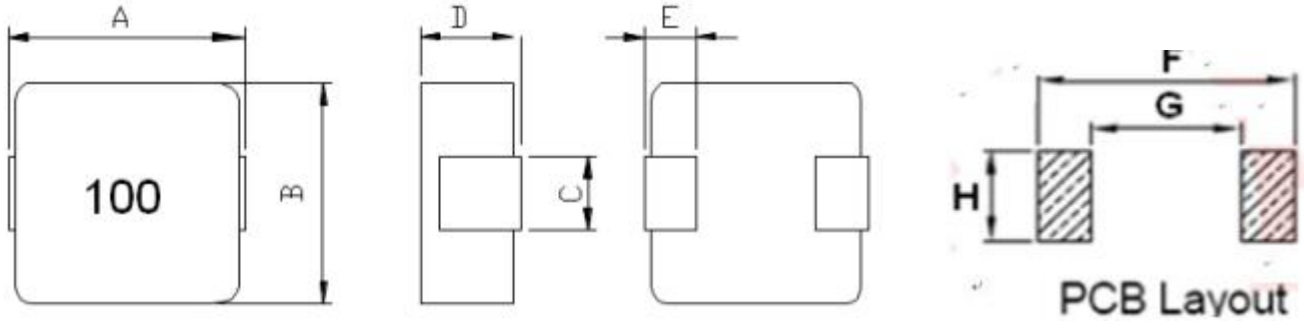
Features

- Compact size using flat wire, and SMD type .
  扁平线小尺寸封装，贴片类型
- Low radiation noise by magnetically shielded construction
  闭合磁路封装，低辐射
- High current, Low resistance.
  大电流，低电阻
- Operating temperature : -40℃~+150℃.
  工作温度： -40℃~+150℃

Applications

- high efficiency DC/DC converters. 高效 DC/DC 转换器
- Single and polyphase buck converters. 单相、多相降压转换器
- Filter for audio applications. 音频滤波应用
- Optimized for high current boost applications. 大电流升压应用优化
- Laptops,Graphic cards,Motherboards. 笔记本、显卡、主板等

Mechanical Dimensions (Unit:mm) 尺寸:



Series Name	A	B	C	D	E	F	G	H	
PWPG54	5.3 ± 0.3	5.3 ± 0.3	1.0 ± 0.3	4.0 ± 0.3	1.2 ± 0.5	6.4	2.0	2.0	
PWPG73	7.0 ± 0.4	6.9 ± 0.4	1.2 ± 0.3	3.3 Max	1.8 ± 0.5	7.8	2.4	2.2	
PWPG74	7.0 ± 0.4	6.9 ± 0.4	1.2 ± 0.3	4.0Max	1.8 ± 0.5	7.8	2.4	2.2	
PWPG75	7.0 ± 0.4	6.9 ± 0.4	1.2 ± 0.3	5.0Max	1.8 ± 0.5	7.8	2.4	2.2	
PWPG103	10.5 ± 0.5	10.2 ± 0.5	2.0 ± 0.5	3.1 Max	2.0 ± 0.5	10.8	3.8	4.0	
PWPG104	10.5 ± 0.5	10.2 ± 0.5	2.0 ± 0.5	4.2 Max	2.0 ± 0.5	10.8	3.8	4.0	
PWPG105	10.5 ± 0.5	10.2 ± 0.5	2.0 ± 0.5	5.0 Max	2.0 ± 0.5	10.8	3.8	4.0	
PWPG134	13.0± 0.5	12.8 ± 0.5	2.5 ± 0.5	3.5Max	3.0 ± 1.0	15.0	6.0	5.0	
PWPG135	13.0± 0.5	12.8 ± 0.5	2.5 ± 0.5	5.0 Max	3.0 ± 1.0	15.0	6.0	5.0	
PWPG136	13.0± 0.5	12.8 ± 0.5	3.0 ± 1.0	6.5 Max	3.0 ± 1.0	15.0	6.0	5.0	
PWPG189	18.3± 0.5	18.2 ± 0.5	3.5 ± 1.5	9.2Max	4.5 ± 1.0	19.3	7.3	6.0	
PWPD2212	10.5 ± 0.5	22.0 ± 0.5	3.5 ± 1.0	12 ± 0.4	5.5 ± 1.0	23.0	9.0	6.0	

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Electrical characteristics 电气特性

Part No. 料号	Inductance (μH)	D.C.R . (mΩ)		Saturation current Isat(A)	Temperature rise current Irms(A)	Wurth P/N
	±20%	Typ.	Max.	Typ.	Typ.	
PWPG54-R22M	0.22	1.25	1.38	25	20	744816022
PWPG54-R33M	0.33	1.75	1.93	20	18.5	744316033
PWPG54-R47M	0.47	2.75	3.03	16	15	744316047
PWPG54-R68M	0.56	4.0	4.4	13.5	12.75	744316068
PWPG54- 1R0M	1.0	4.75	5.23	11.5	11.5	744316100
PWPG54- 1R5M	1.5	8.15	8.97	9	9	744316150
PWPG54-2R2M	2.2	11.3	12.43	7.5	7.5	744316220
PWPG54-3R3M	3.3	18.5	20.35	5.8	5.75	744316330
PWPG54-4R7M	4.7	24.5	26.95	4.7	4.6	744316470
PWPG54- 5R6M	5.6	28.5	31.35	4.6	4.5	744316560

Remark:

1. All test data is referenced to 25"C ambient100kHz,0.1Vmbient所有试验数据参考25“C环境温度, 100kHz, 0. 1V
2. l rms: DCcurrent(A) that will cause an approximate t.T of 50'C. 直流电流（A），温升电流大约50℃的温度
3. lsat: DC current(A) that will cause Lo to drop approximate 30%.直流电流（A），约在Lo下降约30%
4. Operating temperature range is -40°C to 125·c. 工作温度范围为-40°C至125C°C
5. The part temperature(ambient and temp rise) should not exceed 125 · c under worse case operating conditions. C1rcu1t design, component placement, PWB trace size and thickness, airflow and other cooling prov1s1on all affect the part temperature. Part temperature should be verified in the end application在更恶劣的操作条件下，零件温度（环境温度和温升）不应超过125℃。电路设计、部件放置、 PWB跟踪尺寸和厚度、气流和其他冷却条件都会影响零件温度。应在最终应用中验证零件温度

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Electrical characteristics 电气特性

Part No. 料号	Inductance (μH)	D.C.R . (mΩ)		Saturation current Isat(A)	Temperature rise current Irms(A)	Wurth P/N
	±20%	Typ.	Max.	Typ.	Typ.	
PWPG73-R13M	013	0.91	1.00	48.0	22	744310013
PWPG73-R24M	0.24	1.8	1.98	40.0	18.0	744310024
PWPG73-R52M	0.52	3.7	4.07	20.0	14.0	744310055
PWPG73-R95M	0.95	6.2	6.82	13.0	11.0	744310095
PWPG73- 1R2M	1.15	8.6	9.46	13.0	8.5	744310115
PWPG73- 1R5M	1.5	12.7	13.97	12.0	7.5	744310150
PWPG73-2R0M	2.0	14.2	15.62	9.0	6.5	744310200
PWPG74-R22M	0.22	1.1	1.21	32.0	21.0	744311022
PWPG74-R40M	0.40	1.85	2.04	25.0	19.0	744311047
PWPG74-R68M	0.68	3.1	3.41	20.0	17.0	744311068
PWPG74- 1R0M	1.0	4.6	5.06	19.0	15.0	744311100
PWPG74- 1R5M	1.5	6.6	7.26	14.0	11.0	744311150
PWPG74-2R2M	2.2	11.4	12.54	13.0	9.0	744311220
PWPG74-3R3M	3.3	17.2	18.92	11.0	6.5	744311330
PWPG74-4R7M	4.7	19.5	21.45	7.0	6.0	744311470
PWPG75-R24M	0.24	1.0	1.10	28.0	20.0	744314024
PWPG75-R47M	0.47	1.35	1.49	20.0	18.0	744314047
PWPG75-R76M	0.76	2.25	2.48	15.0	15.5	744314076
PWPG75- 1R1M	1.1	3.15	3.47	13.0	15.0	744314110
PWPG75- 1R5M	1.5	4.3	4.73	11.0	13.0	744314150
PWPG75-2R0M	2.0	5.85	6.44	9.0	11.5	744314200
PWPG75-3R3M	3.3	9.0	9.90	8.0	9.0	744314330
PWPG75-4R9M	4.9	14.5	15.95	6.5	6.5	744314490
PWPG75-6R5M	6.5	21.5	23.65	6.0	6..0	744314650
PWPG75- 7R6M	7.6	30.2	33.22	4.8	4.2	744314760
PWPG75-8R5M	8.5	32.5	35.75	4.5	4.0	744314850
PWPG75- 100M	10.0	33.0	36.30	4.0	3.5	744314101

Remark:

6. All test data is referenced to 25"C ambient100kHz,0.1Vmbient所有试验数据参考25“C环境温度，100kHz，0.1V
7. I rms: DCcurrent(A) that will cause an approximate t.T of 50'C. 直流电流（A），温升电流大约50℃的温度
8. Isat: DC current(A) that will cause Lo to drop approximate 30%.直流电流（A），约在Lo下降约30%
9. Operating temperature range is -40°C to 125·c. 工作温度范围为-40°C至125C°C
10. The part temperature(ambient and temp rise) should not exceed 125 · c under worse case operating conditions. C1rcu1t design, component placement, PWB trace size and thickness, airflow and other cooling prov1s1on all affect the part temperature. Part temperature should be verified in the end application在更恶劣的操作条件下，零件温度（环境温度和温升）不应超过125℃。电路设计、部件放置、 PWB跟踪尺寸和厚度、气流和其他冷却条件都会影响零件温度。应在最终应用中验证零件温度

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Electrical characteristics 电气特性

Part No. 料号	Inductance (μH)	D.C.R . (mΩ)		Saturation current Isat(A)	Temperature rise current Irms(A)	Wurth P/N
	±20%	Typ.	Max.	Typ.	Typ.	
PWPG103-R20M	020	0.82	0.90	50.0	22.0	744323020
PWPG103-R33M	0.33	2.17	2.39	36.0	18.0	744323033
PWPG103-R56M	0.56	2.17	2.39	33.0	18.0	744323056
PWPG103-R68M	0.68	4.79	5.27	21.0	14.0	744326068
PWPG103-1R0M	1.0	4.79	5.27	21.0	14.0	744323100
PWPG103-1R2M	1.2	6.6	7.26	15.0	12.0	744323120
PWPG103-1R5M	1.5	6.6	7.26	18.0	12.0	744323150
PWPG103-2R2M	2.2	11.38	12.52	15.0	9.0	744323220
PWPG104-R15M	0.15	0.58	0.64	60.0	25.0	744355215
PWPG104-R30M	0.30	1.10	1.21	35.0	22.0	744355230
PWPG104-R56M	0.56	1.61	1.77	30.0	20.0	744355255
PWPG104-1R0M	1.0	3.30	3.63	20.0	16.0	7443552100
PWPG104-1R5M	1.5	5.30	5.83	17.0	14.0	7443552150
PWPG104-2R2M	2.2	7.30	8.03	13.0	11.0	7443552200
PWPG104-2R8M	2.8	10.60	11.66	11.0	9.5	7443552280
PWPG104-4R3M	4.3	14.10	15.51	8.0	8.0	7443552430
PWPG105-R16M	0.16	0.51	0.55	58.0	25.0	744325016
PWPG105-R40M	0.40	0.87	0.74	37.0	24.0	744325040
PWPG105-R72M	0.72	1.30	1.43	35.0	22.0	744325072
PWPG105-1R2M	1.20	1.80	1.98	25.0	20.0	744325120
PWPG105-1R8M	1.80	3.50	3.85	18.0	16.0	744325180
PWPG105-2R4M	2.40	4.75	5.23	17.0	14.0	744325240
PWPG105-3R3M	3.30	5.90	6.49	15.0	12.0	744325330
PWPG105-4R2M	4.20	7.10	7.81	14.0	11.0	744325420
PWPG105-5R5M	5.50	10.3	11.33	12.0	10.0	744325550
PWPG105-6R5M	6.50	12.5	13.75	10.0	8.4	744325650
PWPG105-7R8M	**7.80**	**13.6**	**14.96**	**9.5**	**8.0**	**744325780**
PWPG105-100M	10.0	16.3	17.93	8.5	7.2	7443251000
PWPG105-160M	16.0	24.5	37.95	6.5	5.0	7443251500

Remark:

1. All test data is referenced to 25"C， 100kHz,0.1Vmbient所有试验数据参考25“C环境温度, 100kHz, 0. 1V
2. l rms: DCcurrent(A) that will cause an approximate t.T of 50'C. 直流电流（A），温升电流大约50℃的温度
3. lsat: DC current(A) that will cause Lo to drop approximate 30%.直流电流（A），约在Lo下降约30%
4. Operating temperature range is -40°C to 125·c. 工作温度范围为-40°C至125C°C
5. The part temperature(ambient and temp rise) should not exceed 125 · c under worse case operating conditions. C1rcu1t design, component placement, PWB trace size and thickness, airflow and other cooling prov1s1on all affect the part temperature. Part temperature should be verified in the end application在更恶劣的操作条件下，零件温度（环境温度和温升）不应超过125℃。电路设计、部件放置、 PWB跟踪尺寸和厚度、气流和其他冷却条件都会影响零件温度。应在最终应用中验证零件温度

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Electrical characteristics 电气特性

Part No. 料号	Inductance (μH)	D.C. R. (mΩ)		Saturation current Isat(A)	Temperature rise current Irms(A)	Wurth P/N
	±20%	Typ.	Max.	Typ.	Typ.	
PWPG134- R25M	0.25	0.75	0.83	60.0	24.0	744313025
PWPG134- R68M	0.68	1.58	1.74	40.0	22.0	744313068
PWPG134- 1R2M	1.20	2.85	3.14	28.0	17.0	744313120
PWPG134- 1R8M	1.80	5.60	6.16	22.0	14.0	744313180
PWPG134- 2R2M	2.20	5.70	6.27	18.0	14.0	744313220
PWPG134- 3R3M	3.30	8.10	8.91	14.0	12.0	744313330
PWPG135- R18M	0.18	0.50	0.55	60.0	29.0	744355019
PWPG135- R47M	0.47	0.90	0.99	50.0	26.0	744355047
PWPG135- R90M	0.90	1.60	1.76	28.0	24.0	744355090
PWPG135- 1R4M	1.40	2.40	2.64	26.0	22.0	744355140
PWPG135- 2R3M	2.30	3.70	4.07	17.0	17.5	744355230
PWPG135- 3R2M	3.20	5.30	5.83	16.0	16.0	744355320
PWPG135-4R8M	4.80	10.5	11.55	13.0	11.0	744355480
PWPG135- 6R0M	6.00	13.5	14.85	11.5	9.5	744355600
PWPG135-8R2M	8.20	11.60	12.76	11.0	10.0	744355820
PWPG135- 100M	10.0	14.10	15.51	10.0	8.5	7443550101
PWPG136- R22M	0.22	0.35	0.39	65.0	32.0	744355122
PWPG136- R47M	0.47	0.57	0.74	50.0	30.0	744355147
PWPG136- R82M	0.72	0.90	0.99	35.0	27.0	744355182
PWPG136- 1R3M	130	1.80	1.98	25.0	25.0	7443551130
PWPG136- 2R0M	2.00	2.50	2.86	22.0	23.0	7443551200
PWPG136- 2R8M	2.80	3.30	3.53	17.5	20.0	7443551280
PWPG136- 3R7M	3.70	4.90	5.39	16.0	17.0	7443551370
PWPG136-4R7M	4.70	7..00	7.70	15.0	13.0	7443551470
PWPG136- 6R0M	6.00	8.40	9.24	14.0	12.0	7443551600
PWPG136-7R3M	7.30	5.90	6.49	12.0	13.0	7443551730
PWPG136-9R2M	**9.20**	**7.80**	**8.58**	**10.5**	**12.0**	**7443551920**
PWPG136- 110M	11.3	9.10	10.0	9.5	11.0	7443551111
PWPG136- 130M	13.0	11.20	12.32	9.0	10.0	7443551131
PWPG136- 150M	15.0	14.8	16.8	8.0	9.0	7443551151
PWPG136- 220M	22.0	24.7	27.17	6.5	6.0	7443551221

Remark:

1. All test data is referenced to 25"C， 100kHz,0.1Vmbient所有试验数据参考25“C环境温度,100kHz,0.1V
2. l rms: DCcurrent(A) that will cause an approximate t.T of 50'C. 直流电流（A），温升电流大约50℃的温度
3. lsat: DC current(A) that will cause Lo to drop approximate 30%.直流电流（A），约在Lo下降约30%
4. Operating temperature range is -40°C to 125·c. 工作温度范围为-40°C至125C°C
5. The part temperature(ambient and temp rise) should not exceed 125 · c under worse case operating conditions. C1rcu1t design, component placement, PWB trace size and thickness, airflow and other cooling prov1s1on all affect the part temperature. Part temperature should be verified in the end application在更恶劣的操作条件下，零件温度（环境温度和温升）不应超过125℃。电路设计、部件放置、 PWB跟踪尺寸和厚度、气流和其他冷却条件都会影响零件温度。应在最终应用中验证零件温度

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	±20%	Typ.	Max.	Typ.	Typ.	
PWPG189-R82M	0.82	0.54	0.58	65.0	41.5	744355082
PWPG189-1R3M	1.30	0.94	1.02	62.0	34.5	744355130
PWPG189-1R9M	1.90	1.20	1.30	52.0	32.5	744355190
PWPG189-2R6M	2.60	1.50	1.71	50.0	31.5	744355260
PWPG189-3R5M	3.50	3.10	3.35	37.0	22.5	744355350
PWPG189-4R5M	4.50	3.40	3.67	37.0	20.5	744355450
PWPG189-5R6M	5.60	3.70	4.00	33.0	19.0	744355560
PWPG189-6R8M	6.8	4.10	4.43	27.0	18.0	744355680
PWPG189-100M	10.0	6.90	7.45	21.5	15.0	7443551100
PWPG189-100MT	10.0	7.10	7.67	18.5	16.50	7443551100
PWPG189-150M	15.0	9.30	10.05	14.0	14.0	7443551500
PWPG189-220M	22.0	14.5	15.77	11.0	11.0	7443552200
PWPG189-330M	33.0	22.6	24.41	9.0	8.5	7443553300
PWPG189-470M	47.0	24.0	36.72	7.0	6.8	7443554700
PWPG2212-3R3M	3.3	1.7	1.87	45	29	74435580330
PWPG2212-6R8M	6.8	2.1	2.31	31	28.5	74435580680
PWPG2212-8R2M	8.2	2.7	2.97	30	25.5	74435580820
PWPG2212- 100M	10.0	3.4	3.74	25	21	74435581000
PWPG2212- 120M	12.0	4.3	4.73	25	19	74435581200
PWPG2212-220M	22.0	7.0	7.7	18	15	74435582200
PWPG2212-330M	33.0	13.2	14.52	15	11.5	74435583300
PWPG2212-470M	47.0	19.2	21.12	12	9	74435584700
PWPG2212-680M	68.0	27.3	30.03	9.5	7.5	74435586800
PWPG2212-820M	82.0	30.4	33.44	8.5	7	74435588200

Remark:

1. All test data is referenced to 25"C， 100kHz,0. 1Vmbient所有试验数据参考25"C环境温度, 100kHz, 0. 1V
2. Irms: DC current(A) that will cause an approximate t.T of 50'C. 直流电流（A），温升电流大约50℃的温度
3. Isat: DC current(A) that will cause Lo to drop approximate30%.直流电流（A）， 约在Lo下降约30%
4. Operating temperature range is -40°C to 125·c. 工作温度范围为-40°C至125C°C
5. The part temperature(ambient and temp rise) should not exceed 125 · c under worse case operating conditions.C1rcu1t design, component placement, PWB trace size and thickness, airflow and other cooling prov1s1on all affect the part temperature. Part temperature should be verified in the end application在更恶劣的操作条件下，零件温度（环境温度和温升）不应超过125℃。电路设计、部件放置、PWB跟踪尺寸和厚度、气流和其他冷却条件都会影响零件温度。应在最终应用中验证零件温度

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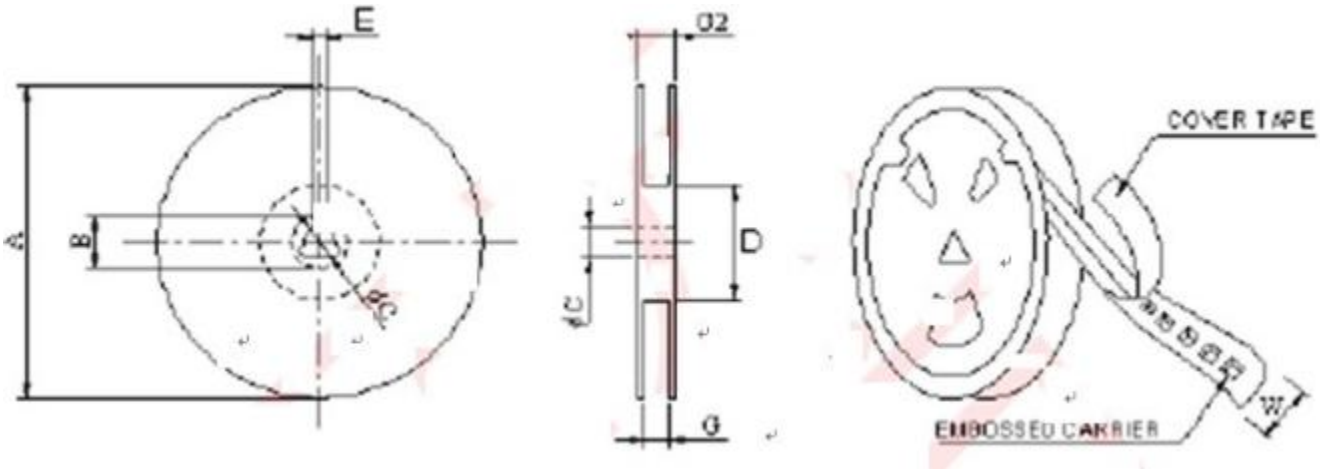
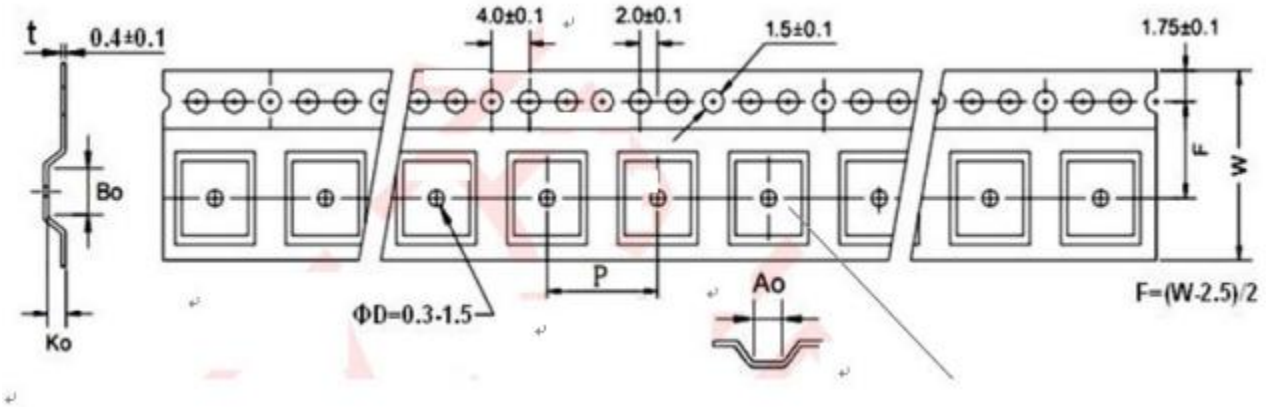
Packing information



CARRIER TAPE WIDTH:W

Series	TYPE	A(Ref.)	B(Ref.)	C(Ref.)	DRef.)	E(Ref.)	G(Ref.)	G2(Ref.)
PWPG54	13*12mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	12.5±0.5	16.5±0.5
PWPG73	13*16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
PWPG74	13*16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
PWPG75	13*16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
PWPG103	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG104	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG105	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG134	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG135	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG136	13*24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG189	13*232mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
PWPG2212	13*44mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	32.5±0.5	37±0.5

PWPG SERIES HIGH CURRENT POWER INDUCTOR 大电流功率电感



Series	QTY (Pcs/Reel)	Ao	Bo	Ko	W	p
PWPG54	1500	5 .6	6 .0	4.2	12	8
PWPG73	1500	7.2	7.8	3.5	16	12
PWPG74	1000	7 .2	7 .8	4.2	16	12
PWPG75	1000	7.2	7 .8	5.2	16	12
PWPG103	80 0	10 .8	1 1.3	3.5	24	16
PWPG104	800	10 .8	1 1.3	4.2	24	16
PWPG105	700	10 .8	1 1.3	5.2	24	16
PWPG134	600	13,. 5	1 4,. 0	3.7	24	16
PWPG135	500	13 .5	14,. 0	5.2	24	16
PWPG136	500	13,. 5	14,. 0	6.7	24	16
PWPG189	250	18.8	19 .4	9.5	32	24
PWPG2212	120	23,. 1	23 .65	12 .8	44	32