

APSW-H Series

Features

- Carbonyl powder Inductors
- It corresponds to Ultra High current.
- Simple and Shield structure.
- Available tape and reel for auto insertion.
- RoHS compliance.

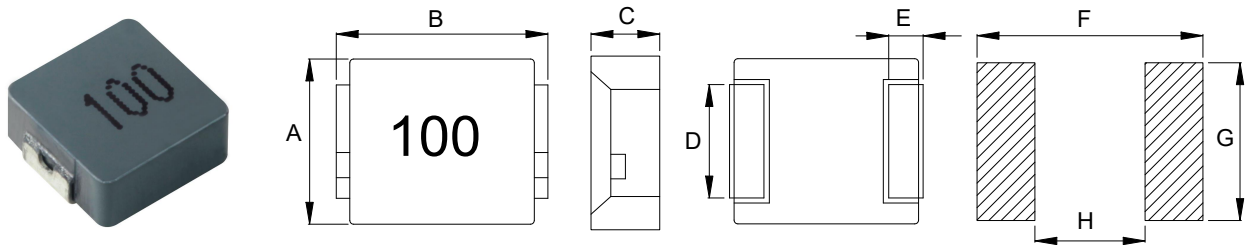
Applications

- For small DC/DC converter (cellular Phone , LCD/LED/OLED display ,HDD,DSC etc).

Test Equipment and Conditions

- All test data is referenced to 25°C ambient.
- DC current (I_{rms}) that will cause an approximate ΔT of 40°C.
- DC current (I_{sat}) that will cause L_o to drop approximately 40%.
- Operating temperature range -40°C to +125°C.
- Absolute maximum voltage 30VDC.

External Dimensions (Unit:m/m)



Type	A	B	C	D Typ.	E Typ.	F Typ.	G Typ.	H Typ.	Q'Ty/Reel
APSW03H20	3.2±0.3	3.8Max	2.0Max	1.2	0.7	4.1	1.45	1.9	3000
APSW04H20	4.2±0.3	4.8Max	2.0Max	2.0	0.8	5.2	2.5	2.2	3000
APSW05H20	5.2±0.3	6.0Max	2.0Max	2.0	1.2	6.0	2.5	2.2	2000
APSW05H30	5.2±0.3	6.0Max	3.0Max	2.0	1.2	6.0	2.5	2.2	2000
APSW07H18	6.6±0.3	7.7Max	1.8Max	3.0	1.6	8.4	3.5	3.7	2000
APSW07H24	6.6±0.3	7.7Max	2.4Max	3.0	1.6	8.4	3.5	3.7	1500
APSW07H30	6.6±0.3	7.7Max	3.0Max	3.0	1.6	8.4	3.5	3.7	1500
APSW07H50	6.6±0.3	7.7Max	5.0Max	3.0	1.6	8.4	3.5	3.7	1000
APSW10H30	10.0±0.3	11.5Max	3.0Max	3.0	2.0	13.6	4.1	5.4	800
APSW10H40	10.0±0.3	11.5Max	4.0Max	3.0	2.0	13.6	4.1	5.4	500
APSW13H35	12.6±0.3	14.0Max	3.5Max	See Remark	2.0	14.2	5.0	8.0	500
APSW13H50	12.6±0.3	14.0Max	5.0Max	See Remark	2.0	14.2	5.0	8.0	500
APSW13H60	12.6±0.3	14.0Max	6.0Max	See Remark	2.0	14.2	5.0	8.0	500
APSW13H65	12.6±0.3	14.0Max	6.5Max	See Remark	2.0	14.2	5.0	8.0	500
APSW17H70	17.0±0.3	18.0Max	7.0Max	12.0	2.5	18.2	12.8	11.2	200

Remark:

Type	D(mm)Typ.	
	3.85	4.7
APSW13H35	R47~R82	1R0~470
APSW13H50	R33~1R5	2R2~330
APSW13H60	R47~1R5	2R2~151
APSW13H65	R47~1R5	2R2~680

Part Number Code

APSW 03 H 20 M R47
 A B C D E F

A: Series Name Carbonyl powder Inductors
 B: Dimensions(mm) 03: 3.2 x 3.8
 C: Materials H Typ
 D: Thickness(mm) 20: 2.0 Max
 E: Tolerance M: $\pm 20\%$
 F: Inductance R47=0.47uH

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW03H20MR33	0.33	21.0	8.05	10.1
APSW03H20MR47	0.47	22.8	7.20	9.30
APSW03H20MR68	0.68	28.8	5.65	7.20
APSW03H20M1R0	1.0	37.5	4.10	5.15
APSW03H20M1R5	1.5	49.5	3.88	4.10
APSW03H20M2R2	2.2	74.0	3.55	3.78
APSW03H20M3R3	3.3	142.5	3.05	3.55
APSW03H20M4R7	4.7	196.5	2.63	3.05
APSW03H20M5R6	5.6	233.3	2.23	2.63
APSW03H20M6R8	6.8	295.0	1.92	2.23
APSW03H20M8R2	8.2	385.0	1.62	1.92
APSW03H20M100	10.0	417.0	1.42	1.62
APSW04H20MR33	0.33	8.6	10.0	18.20
APSW04H20MR47	0.47	13.9	8.10	12.35
APSW04H20MR68	0.68	19.0	7.25	10.10
APSW04H20M1R0	1.0	26.6	5.25	8.60
APSW04H20M1R5	1.5	41.8	4.15	7.20
APSW04H20M2R2	2.2	61.0	4.25	6.15
APSW04H20M3R3	3.3	76.0	3.50	4.00
APSW04H20M4R7	4.7	105.0	2.65	3.58
APSW04H20M6R8	6.8	172.0	2.10	2.84
APSW04H20M100	10.0	243.0	1.84	2.32
APSW05H20MR22	0.22	5.5	15.0	25.0
APSW05H20MR33	0.33	7.3	12.0	21.3
APSW05H20MR47	0.47	8.6	11.5	18.0

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW05H20MR68	0.68	12.4	10.0	12.8
APSW05H20M1R0	1.0	20.0	7.0	13.7
APSW05H20M1R5	1.5	30.5	5.5	9.8
APSW05H20M2R2	2.2	50.0	4.2	9.0
APSW05H20M3R3	3.3	76.0	3.3	7.3
APSW05H20M4R7	4.7	116.0	2.8	5.0
APSW05H20M6R8	6.8	150.0	2.4	3.8
APSW05H20M100	10.0	199.0	2.3	3.4
APSW05H20M220	22.0	390.0	1.5	1.8
APSW05H30MR22	0.22	4.4	15.5	21.0
APSW05H30MR33	0.33	5.0	14.0	18.0
APSW05H30MR47	0.47	7.4	12.0	16.0
APSW05H30MR68	0.68	12.0	8.5	14.0
APSW05H30MR82	0.82	13.0	8.0	12.5
APSW05H30M1R0	1.0	14.0	7.0	11.0
APSW05H30M1R5	1.5	25.0	6.0	10.0
APSW05H30M2R2	2.2	35.0	5.5	9.0
APSW05H30M3R3	3.3	38.0	5.0	8.0
APSW05H30M4R7	4.7	53.0	4.6	6.0
APSW05H30M5R6	5.6	63.0	4.25	4.5
APSW05H30M6R8	6.8	76.2	4.0	4.3
APSW05H30M100	10.0	128.0	2.75	3.5
APSW05H30M150	15.0	190.0	2.1	2.6
APSW05H30M220	22.0	250.0	1.9	1.7
APSW07H18MR22	0.22	3.0	16.0	26.0
APSW07H18MR33	0.33	5.8	14.0	22.0
APSW07H18MR47	0.47	7.4	12.0	18.0
APSW07H18MR68	0.68	11.0	10.0	17.0
APSW07H18MR82	0.82	14.0	8.5	15.5
APSW07H18M1R0	1.0	17.0	7.0	14.0
APSW07H18M1R5	1.5	25.2	6.0	13.0
APSW07H18M2R2	2.2	35.0	6.0	11.0
APSW07H18M3R3	3.3	46.0	5.0	9.0
APSW07H18M4R7	4.7	76.0	4.0	7.0
APSW07H18M6R8	6.8	104.0	3.0	5.5

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW07H18M100	10.0	160.0	2.3	3.5
APSW07H24MR15	0.15	2.3	30.0	45.0
APSW07H24MR22	0.22	3.2	21.0	34.0
APSW07H24MR33	0.33	4.4	18.0	30.0
APSW07H24MR47	0.47	5.1	15.0	26.0
APSW07H24MR68	0.68	7.2	13.0	21.0
APSW07H24MR82	0.82	9.5	11.0	17.0
APSW07H24M1R0	1.0	13.5	10.0	16.0
APSW07H24M1R5	1.5	20.0	9.0	15.0
APSW07H24M2R2	2.2	28.0	7.0	14.0
APSW07H24M3R3	3.3	39.0	6.0	10.0
APSW07H24M4R7	4.7	50.0	5.5	9.0
APSW07H24M6R8	6.8	72.0	4.0	7.0
APSW07H24M100	10.0	101.0	3.2	5.0
APSW07H30NR10	0.10	1.7	32.5	60.0
APSW07H30MR15	0.15	1.9	27.0	45.0
APSW07H30MR22	0.22	2.8	23.0	40.0
APSW07H30MR33	0.33	3.9	20.0	32.0
APSW07H30MR47	0.47	4.2	17.5	26.0
APSW07H30MR56	0.56	5.0	16.5	25.5
APSW07H30MR68	0.68	5.5	15.5	25.0
APSW07H30MR82	0.82	8.0	13.0	24.0
APSW07H30M1R0	1.0	10.0	11.0	22.0
APSW07H30M1R5	1.5	15.0	9.0	18.0
APSW07H30M2R2	2.2	20.0	8.0	14.0
APSW07H30M3R3	3.3	30.0	6.0	13.5
APSW07H30M4R7	4.7	40.0	5.5	10.0
APSW07H30M5R6	5.6	48.0	5.0	9.0
APSW07H30M6R8	6.8	60.0	4.5	8.0
APSW07H30M8R2	8.2	68.0	4.0	7.5
APSW07H30M100	10.0	85.0	3.5	6.0
APSW07H30M150	15.0	123.0	3.0	4.0
APSW07H30M220	22.0	190.0	2.0	3.5
APSW07H30M330	33.0	240.0	2.0	2.5

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW07H30M470	47.0	363.0	1.75	2.0
APSW10H40MR22	0.22	1.0	35.0	60.0
APSW10H40MR36	0.36	1.2	31.0	60.0
APSW10H40MR45	0.45	1.5	29.0	45.0
APSW10H40MR47	0.47	1.5	28.0	43.0
APSW10H40MR56	0.56	1.8	25.0	40.0
APSW10H40MR68	0.68	2.7	22.0	39.0
APSW10H40M1R0	1.0	3.3	18.0	36.0
APSW10H40M1R5	1.5	4.6	16.0	33.0
APSW10H40M2R2	2.2	7.0	12.0	27.0
APSW10H40M3R3	3.3	11.8	11.0	20.0
APSW10H40M4R7	4.7	15.5	10.0	17.0
APSW10H40M5R6	5.6	19.3	9.0	14.0
APSW10H40M6R8	6.8	23.3	8.5	13.5
APSW10H40M100	10.0	30.0	7.5	12.0
APSW10H40M150	15.0	45.0	6.25	10.0
APSW10H40M220	22.0	74.0	5.0	7.0
APSW10H40M330	33.0	112.0	3.5	5.0
APSW10H40M470	47.0	167.0	3.0	4.5
APSW13H35MR47	0.47	2.0	32.0	55.0
APSW13H35MR68	0.68	2.5	28.0	49.0
APSW13H35MR82	0.82	3.0	25.0	44.0
APSW13H35M1R0	1.0	3.5	24.0	40.0
APSW13H35M1R5	1.5	5.5	19.0	35.0
APSW13H35M2R2	2.2	8.0	16.0	29.0
APSW13H35M3R3	3.3	12.0	12.0	27.0
APSW13H35M4R7	4.7	18.0	10.0	22.0
APSW13H35M5R6	5.6	22.0	9.5	19.0
APSW13H35M6R8	6.8	24.0	9.0	18.0
APSW13H35M8R2	8.2	28.0	8.5	16.0
APSW13H35M100	10.0	34.0	7.5	14.0
APSW13H35M150	15.0	65.0	6.5	10.0
APSW13H35M220	22.0	99.0	4.5	7.0
APSW13H35M330	33.0	160.0	3.5	6.0

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW13H35M470	47.0	218.0	3.0	5.5
APSW13H50MR33	0.33	0.9	42.0	80.0
APSW13H50MR47	0.47	1.1	38.0	65.0
APSW13H50MR56	0.56	1.5	36.0	55.0
APSW13H50MR68	0.68	1.7	34.0	54.0
APSW13H50MR82	0.82	2.1	31.0	52.0
APSW13H50M1R0	1.0	2.5	29.0	50.0
APSW13H50M1R5	1.5	3.3	27.0	48.0
APSW13H50M2R2	2.2	5.5	20.0	32.0
APSW13H50M3R3	3.3	9.2	15.0	32.0
APSW13H50M4R7	4.7	15.0	12.0	27.0
APSW13H50M5R6	5.6	16.5	11.5	22.0
APSW13H50M6R8	6.8	18.5	11.0	21.0
APSW13H50M8R2	8.2	22.5	9.5	18.0
APSW13H50M100	10.0	25.5	9.0	16.0
APSW13H50M150	15.0	38.0	8.2	13.0
APSW13H50M220	22.0	58.0	6.5	10.0
APSW13H50M330	33.0	88.0	5.0	8.0
APSW13H60MR47	0.47	1.3	38.0	64.0
APSW13H60MR68	0.68	1.7	33.0	57.0
APSW13H60M1R0	1.0	2.4	29.0	53.0
APSW13H60M1R5	1.5	3.2	26.0	50.0
APSW13H60M2R2	2.2	4.7	21.0	43.0
APSW13H60M3R3	3.3	7.1	17.0	35.0
APSW13H60M4R7	4.7	11.5	16.0	30.0
APSW13H60M6R8	6.8	13.8	15.0	25.0
APSW13H60M8R2	8.2	16.0	11.0	23.0
APSW13H60M100	10.0	20.7	11.0	21.0
APSW13H60M150	15.0	29.0	9.0	16.0
APSW13H60M220	22.0	39.5	8.0	14.0
APSW13H60M330	33.0	75.0	6.0	12.0
APSW13H60M470	47.0	90.0	5.5	11.0
APSW13H60M680	68.0	140.0	5.0	9.0
APSW13H60M820	82.0	161.0	4.5	8.5

APSW-H Series

Part Number	Inductance (uH) @100KHz/1V	DC Resistance (mΩ)Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APSW13H60M101	100.0	200.0	4.0	8.0
APSW13H60M121	120.0	235.0	3.5	7.0
APSW13H60M151	150.0	350.0	3.0	6.0
APSW13H65MR47	0.47	1.2	41.0	63.0
APSW13H65MR68	0.68	1.5	35.0	55.0
APSW13H65M1R0	1.0	2.3	30.0	48.0
APSW13H65M1R5	1.5	3.0	27.0	45.0
APSW13H65M2R2	2.2	4.2	22.0	37.0
APSW13H65M3R3	3.3	6.8	18.0	30.0
APSW13H65M4R7	4.7	8.4	13.5	28.0
APSW13H65M6R8	6.8	11.5	11.5	18.0
APSW13H65M8R2	8.2	15.5	10.5	16.0
APSW13H65M100	10.0	16.5	10.0	15.5
APSW13H65M150	15.0	28.0	9.0	13.0
APSW13H65M220	22.0	37.0	9.0	12.0
APSW13H65M330	33.0	58.0	8.0	11.0
APSW13H65M470	47.0	90.0	6.5	9.5
APSW13H65M680	68.0	130.0	4.8	7.8
APSW17H70M1R0	1.0	2.0	52.0	60.0
APSW17H70M1R5	1.5	2.5	47.0	52.0
APSW17H70M2R2	2.2	2.7	43.5	47.0
APSW17H70M3R3	3.3	3.9	28.0	45.0
APSW17H70M4R7	4.7	5.5	25.0	41.0
APSW17H70M6R8	6.8	9.2	19.0	32.0
APSW17H70M8R2	8.2	10.8	18.0	25.0
APSW17H70M100	10.0	13.0	16.5	24.0
APSW17H70M150	15.0	20.5	12.5	23.0
APSW17H70M220	22.0	26.5	12.0	18.0
APSW17H70M330	33.0	44.0	10.7	15.0
APSW17H70M390	39.0	48.0	9.2	11.0
APSW17H70M470	47.0	55.0	8.7	9.5
APSW17H70M560	56.0	62.0	7.8	9.0
APSW17H70M680	68.0	80.0	7.0	8.0
APSW17H70M101	100.0	118.0	5.3	6.5