

AAPS Series

Features

- Qualified to AEC-Q200.
- Alloy powder Inductor.
- 100% lead (Pb)-free.
- Lowest DCR/uH, in this package size.
- Handles high transient current spikes without saturation.
- Ultra low buzz noise, due to composite construction.
- RoHS compliance.
- Halogen Free.

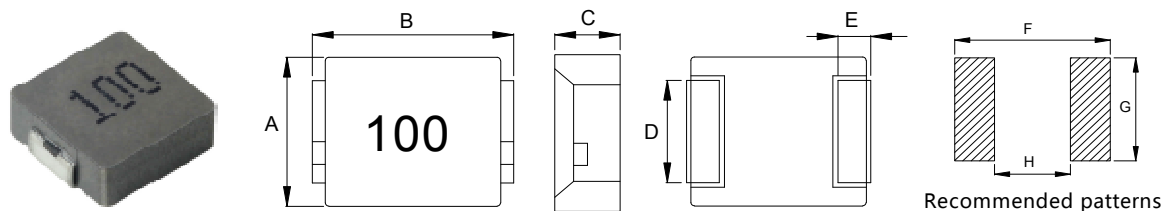
Applications

- Automotive applications.

Test Equipment and Conditions

- All test data is referenced to 25°C ambient.
- Operating temperature range -55°C to +155°C.(Including self - temperature rise)
- DC current(Irms)that will cause an approximate ΔT of 40°C.
- DC current(Isat)that will cause Lo to drop approximately 40%.
- For AAPS04~07 size project ,absolute maximum voltage 60VDC;
- Above AAPS10 size project, absolute maximum voltage 100VDC.

External Dimensions (Unit:mm)



TYPE	A	B Max	C Max	D typ	E typ	F typ	G typ	H typ	Q'TY/Reel
AAPS0412	4.2±0.3	4.8	1.2	2.0	0.8	5.2	2.5	2.2	3000
AAPS0420	4.2±0.3	4.8	2.0	2.0	0.8	5.2	2.5	2.2	3000
AAPS0515	5.2±0.3	5.8	1.5	2.2	1.2	5	2.5	2.2	3000
AAPS0518	5.2±0.3	5.8	1.8	2.2	1.2	6.0	2.5	2.2	2000
AAPS0530	5.2±0.3	5.8	3.0	2.2	1.2	6.0	2.5	2.2	2000
AAPS0615	6.6±0.3	7.7	1.5	3.0	1.6	8.4	3.5	3.7	2000
AAPS0618	6.6±0.3	7.7	1.8	3.0	1.6	8.4	3.5	3.7	1500
AAPS0624	6.6±0.3	7.7	2.4	3.0	1.6	8.4	3.5	3.7	1500
AAPS0630	6.6±0.3	7.7	3.0	3.0	1.6	8.4	3.5	3.7	1000
AAPS0650	6.6±0.3	7.7	5.0	3.0	1.7	8.4	3.5	3.6	1000
AAPS0754	7.2±0.3	8.2	5.4	3.0	2.0	9.0	3.5	2.6	500
AAPS0840	8.2±0.3	9.2	4.0	5	1.4	9.5	5.5	4	800
AAPS1030	10.0±0.5	11.5	3.0	3.0	2.0	13.6	4.1	5.4	1000

TYPE	A	B Max	C Max	D typ	E typ	F typ	G typ	H typ	Q'TY/Reel
AAPS1040	10.0±0.5	11.5	4.0	3.0	2.0	13.6	4.1	5.4	500
AAPS1050	10.0±0.5	11.5	5.0	3.0	2.0	13.6	4.1	5.4	500
AAPS1054	10.0±0.3	11.3	5.4	4.5	2.2	12.88	5.0	4.9	500
AAPS1350	12.6±0.3	13.9	5.0	See Remark	2.0	14.5	5.0	8.0	500
AAPS1360	12.6±0.3	13.9	6.0	See Remark	2.0	14.5	5.0	8.0	500
AAPS1770	16.9±0.3	17.5	7.0	11.9	2.5	20.0	12.3	12.4	200
AAPS2213	22.0±0.3	24.0	13.0	19	5.0	24	19.6	12.5	80

Remark:

TYPE	D(mm)Typ.	
	3.85	5.0
AAPS1350	R22~2R2	3R3~470
AAPS1360	1R0~2R2	3R3~151

2. Part Number Code

APS	04	20	M	100	A
Series Name	Dimensions: L*W	Dimensions: H	Tolerance 20%	Inductance	Materials

AAPS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0412MR15A	0.15	8.9	7.57	15.16
AAPS0412MR22A	0.22	10.9	7.05	11.12
AAPS0412MR33A	0.33	18.8	6.55	8.48
AAPS0412MR47A	0.47	20.8	6.06	6.86
AAPS0412MR68A	0.68	35.5	4.74	6.06
AAPS0412M1R0A	1	46.5	4.55	5.55
AAPS0412M1R5A	1.5	74.3	3.28	4.05
AAPS0412M2R2A	2.2	82.7	2.77	3.54
AAPS0412M4R7A	4.7	193	1.82	2.83
AAPS0420MR10A	0.1	3.9	13.13	22.22
AAPS0420MR22A	0.22	6.5	9.6	12.62
AAPS0420MR33A	0.33	10.9	10.1	12.13
AAPS0420MR47A	0.47	13.8	7.55	9.59
AAPS0420MR56A	0.56	15.8	7.07	10.11

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0420MR68A	0.68	17.8	7.07	9.1
AAPS0420M1R0A	1	26.7	6.05	7.07
AAPS0420M1R2A	1.2	26.8	6.06	7.07
AAPS0420M1R5A	1.5	45.5	5.05	6.05
AAPS0420M2R2A	2.2	57.5	4.55	5.05
AAPS0420M3R3A	3.3	86.5	3.35	4.05
AAPS0420M4R7A	4.7	104	2.82	3.03
AAPS0420M6R8A	6.8	173	2.42	2.52
AAPS0420M100A	10	279	1.61	2.22
AAPS0420M150A	15	410	1.5	1.8
AAPS0515MR47A	0.47	12.6	10	15
AAPS0515MR68A	0.68	15.5	8	10.5
AAPS0515M1R0A	1	23	6.5	9
AAPS0515M2R2A	2.2	52	4	6
AAPS0515M100A	10	170	2	3
AAPS0518MR47A	0.47	8.9	10.6	15.65
AAPS0518MR56A	0.56	9.9	9.6	15.2
AAPS0518M1R0A	1	16.8	8.08	9.1
AAPS0518M1R5A	1.5	25.7	7.57	9.1
AAPS0518M2R2A	2.2	34.7	5.05	6.56
AAPS0518M3R3A	3.3	57.4	4.55	5.05
AAPS0518M4R7A	4.7	84.1	3.53	4.05
AAPS0518M6R8A	6.8	118.9	2.82	3.43
AAPS0518M100A	10	153	2.52	3.03
AAPS0530MR10A	0.1	2.9	25.3	33.4
AAPS0530MR15A	0.15	3.3	17.1	26.7
AAPS0530MR20A	0.2	3.8	14.15	14.65
AAPS0530MR33A	0.33	5.5	14	18
AAPS0530MR47A	0.47	8.1	11.12	12.15
AAPS0530MR68A	0.68	11.8	9.1	11.6
AAPS0530M1R0A	1	13.8	8.6	11.12
AAPS0530M1R2A	1.2	15.8	8.6	11.12
AAPS0530M1R5A	1.5	24.7	8.3	8.6
AAPS0530M2R2A	2.2	28.8	7.05	7.6
AAPS0530M3R3A	3.3	37.6	5.55	6.05

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0530M4R7A	4.7	59	4.55	5.05
AAPS0530M6R8A	6.8	89	3.53	4.05
AAPS0530M100A	10	124	3.23	3.54
AAPS0530M150A	15	196	2	2.2
AAPS0530M220A	22	248	1.7	2.3
AAPS0615MR47A	0.47	8.5	16	10
AAPS0615MR56A	0.56	11	14	9
AAPS0615MR68A	0.68	12	12	8.5
AAPS0615MR82A	0.82	17	10	8
AAPS0615M1R0A	1	21	9	6
AAPS0615M2R2A	2.2	54	7	3.8
AAPS0615M3R3A	3.3	63	5.5	3.5
AAPS0615M4R7A	4.7	85	5	3.2
AAPS0615M6R8A	6.8	135	4	2.5
AAPS0615M100A	10	175	3	2
AAPS0618MR47A	0.47	8.3	11.6	18.2
AAPS0618MR68A	0.68	11.9	9.6	17.2
AAPS0618M1R0A	1	15.5	8.6	14.15
AAPS0618M1R5A	1.5	25.7	8.08	12.12
AAPS0618M2R2A	2.2	34.6	7.05	8.1
AAPS0618M3R3A	3.3	49	4.55	6.55
AAPS0618M4R7A	4.7	61	4.05	5.05
AAPS0618M6R8A	6.8	108	3.03	4.55
AAPS0624MR22A	0.22	2.9	21.22	34.35
AAPS0624MR33A	0.33	4	18.18	24.75
AAPS0624MR47A	0.47	5	15.15	22.22
AAPS0624MR56A	0.56	6.4	13.15	17.2
AAPS0624MR68A	0.68	6.9	12.15	16.15
AAPS0624M1R0A	1	13.3	9.1	16.15
AAPS0624M1R5A	1.5	20	9.1	15.15
AAPS0624M2R2A	2.2	27.8	7.05	14.15
AAPS0624M3R3A	3.3	38.5	5.55	10.1
AAPS0624M4R7A	4.7	59.5	5.05	7.55
AAPS0624M6R8A	6.8	70	4.05	6.06
AAPS0624M100A	10	100	3.13	4.05

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0624M150A	15	158	2.52	3.33
AAPS0624M220A	22	227	2.02	2.52
AAPS0630MR10A	0.1	1.7	35	43
AAPS0630MR12A	0.12	0.95	36	50
AAPS0630MR15A	0.15	2.3	26	41
AAPS0630MR22A	0.22	3	24.25	34.35
AAPS0630MR24A	0.24	3	23.23	26.26
AAPS0630MR33A	0.33	3.5	21.2	25.25
AAPS0630MR47A	0.47	4.1	18.2	20.2
AAPS0630MR56A	0.56	4.3	16.65	18.2
AAPS0630MR68A	0.68	5.3	16.16	17.15
AAPS0630MR82A	0.82	5.9	14.14	16.15
AAPS0630M1R0A	1	7.3	12.12	15.15
AAPS0630M1R5A	1.5	12	12.12	14.15
AAPS0630M2R2A	2.2	14.8	9.6	10.1
AAPS0630M3R3A	3.3	21.8	8.55	9.55
AAPS0630M4R7A	4.7	32.5	6.06	9
AAPS0630M6R8A	6.8	47.5	5.05	6.05
AAPS0630M8R2A	8.2	59.5	5.05	6.05
AAPS0630M100A	10	66.3	4.55	5.55
AAPS0630M150A	15	113	3.03	4.55
AAPS0630M220A	22	170	2.5	3.03
AAPS0630M330A	33	270	2.02	2.52
AAPS0630M470A	47	385	1.5	2
AAPS0650MR22A	0.22	2.5	30.03	35.35
AAPS0650MR47A	0.47	4.8	20.02	21.21
AAPS0650MR56A	0.56	5.4	18.18	18.18
AAPS0650MR68A	0.68	5.9	16.16	16.16
AAPS0650MR82A	0.82	7.3	14.15	15.15
AAPS0650M1R0A	1	6.4	14.15	18.18
AAPS0650M1R5A	1.5	7.4	12.12	15.65
AAPS0650M1R8A	1.8	12	10	12
AAPS0650M2R2A	2.2	12.3	10.1	14.14
AAPS0650M3R3A	3.3	21.7	8.58	12.12
AAPS0650M4R7A	4.7	24.7	7.07	10.1

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0650M6R8A	6.8	41	5.5	7.07
AAPS0650M8R2A	8.2	48	5.05	6.7
AAPS0650M100A	10	54.3	4.55	6.55
AAPS0650M150A	15	85	3.1	4.5
AAPS0650M220A	22	138	2.52	4.04
AAPS0650M330A	33	178	2.32	3.53
AAPS0754M1R5D	1.5	7.3	11.4	16.3
AAPS0754M2R2D	2.2	11.4	9.7	14.8
AAPS0754M3R3D	3.3	15.4	8	13.5
AAPS0754M4R7D	4.7	20.9	7	13.1
AAPS0754M6R8D	6.8	26.6	6.1	10.2
AAPS0754M8R2D	8.2	31.9	5.6	9
AAPS0754M100D	10	38	5.2	8
AAPS0754M150D	15	66	3.8	6.9
AAPS0754M220D	22	93.5	3.3	6.3
AAPS0754M330RD	33	127.6	3.2	4.9
AAPS0754M470RD	47	171.6	2.4	4.1
AAPS0754M680RD	68	240	2.1	4.3
AAPS0754M101RD	100	345	1.8	3.3
AAPS0840MR22A	0.22	1.8	36	60
AAPS0840MR33A	0.33	2.4	30	45
AAPS0840MR47A	0.47	2.8	28	42
AAPS0840MR56A	0.56	3.2	24	26
AAPS0840MR68A	0.68	3.8	23	24
AAPS0840MR82A	0.82	4.4	21	21
AAPS0840M1R0A	1	4.62	19	19
AAPS0840M1R5A	1.5	7.6	17	17
AAPS0840M1R8A	1.8	11	15	15
AAPS0840M2R2A	2.2	11.4	14	14
AAPS0840M3R3A	3.3	15	12	12.5
AAPS0840M4R7A	4.7	26.5	9.5	11.5
AAPS0840M5R6A	5.6	30	9	11
AAPS0840M6R8A	6.8	36.8	8	9
AAPS0840M8R2A	8.2	46	7	8.7
AAPS0840M100A	10	59	6.5	8

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0840M150A	15	71	5.4	5.5
AAPS0840M220A	22	113	4.8	5
AAPS0840M330A	33	156	3.5	3.5
AAPS0840M470A	47	225	2.9	3.1
AAPS1030MR22A	0.22	1.2	33	50
AAPS1030MR33A	0.33	1.6	23	32
AAPS1030MR36A	0.36	1.6	23	28
AAPS1030MR47A	0.47	2.5	22	26
AAPS1030MR82A	0.82	3.7	18	23
AAPS1030M1R0A	1	6	15	21
AAPS1030M2R2A	2.2	9	11	14
AAPS1030M3R3A	3.3	16	9	12
AAPS1030M4R7A	4.7	24.5	7	10
AAPS1030M8R2A	8.2	45	5	7
AAPS1030M100A	10	50	4	7
AAPS1030M330A	33	160	2.5	4
AAPS1040MR15A	0.15	0.6	45.45	75.75
AAPS1040MR22A	0.22	1	35.35	60.6
AAPS1040MR30A	0.3	1	35.35	50.5
AAPS1040MR36A	0.36	1.2	30.3	50.5
AAPS1040MR47A	0.47	1.6	30.3	40.4
AAPS1040MR56A	0.56	1.7	25.25	33.33
AAPS1040MR68A	0.68	2.3	23.23	30.3
AAPS1040MR80A	0.8	2.6	23.23	29.3
AAPS1040M1R0A	1	3.2	19.2	28.28
AAPS1040M1R5A	1.5	4.1	16.15	26.25
AAPS1040M2R2A	2.2	6.9	12.12	18.18
AAPS1040M3R3A	3.3	11.6	11.1	16.15
AAPS1040M4R7A	4.7	19.9	9.1	15.15
AAPS1040M5R6A	5.6	22	8.5	12
AAPS1040M6R8A	6.8	24.7	8.58	12.12
AAPS1040M8R2A	8.2	26.5	8.08	9.1
AAPS1040M100A	10	29.7	7.87	8.6
AAPS1040M150A	15	44.5	6.55	7.07
AAPS1040M220A	22	65.3	5.05	5.55

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS1040M330A	33	91	4.44	5.05
AAPS1040M470A	47	143	3.33	3.53
AAPS1040M680A	68	193	2.52	3.03
AAPS1040M101A	100	340	2.2	2.3
AAPS1050MR22A	0.22	0.8	37	65
AAPS1050M1R0A	1	2.8	23.5	30
AAPS1050M2R2A	2.2	6	14	19
AAPS1050M3R3A	3.3	9.8	14	16
AAPS1050M4R7A	4.7	14	11	15
AAPS1050M5R6A	5.6	17	9.7	14
AAPS1050M6R8A	6.8	18.5	9.2	14
AAPS1050M100A	10	28	8.2	10
AAPS1050M150A	15	42	6.5	7.5
AAPS1050M220A	22	50	5.5	6
AAPS1050M330A	33	86	4.8	5.2
AAPS1050M470A	47	127	3.7	4.5
AAPS1050M680A	68	180	2.7	3.5
AAPS1050M101A	100	290	2.1	2.8
AAPS1054MR68D	0.68	2.22	32	46
AAPS1054M1R0D	1	2.76	30	37
AAPS1054M1R5D	1.5	4.2	24.8	26.8
AAPS1054M2R2D	2.2	4.9	23	25
AAPS1054M3R3D	3.3	7.4	18.7	19
AAPS1054M4R7D	4.7	10	14.5	15.7
AAPS1054M6R8D	6.8	14	12	13.3
AAPS1054M100D	10	24.2	8.7	12.7
AAPS1054M150D	15	31.3	7.6	9.2
AAPS1054M220D	22	50	6	8.8
AAPS1054M330D	33	75.3	4.8	7.6
AAPS1054M470D	47	103	4.1	4.9
AAPS1054M680D	68	152	3.3	4.2
AAPS1054M101D	100	234	2.8	3.5
AAPS1350MR22A	0.22	0.7	50.5	75.75
AAPS1350MR36A	0.36	0.8	42.4	50.5
AAPS1350MR47A	0.47	1.1	38.38	48.5

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS1350MR68A	0.68	1.5	33.33	46.46
AAPS1350MR82A	0.82	1.6	30.3	39.39
AAPS1350M1R0A	1	2.2	26.26	35.35
AAPS1350M1R5A	1.5	3.1	23.23	33.33
AAPS1350M2R2A	2.2	4.9	15.15	24.25
AAPS1350M3R3A	3.3	6.9	14.15	22.23
AAPS1350M4R7A	4.7	8.9	13.13	21.2
AAPS1350M6R8A	6.8	17.9	12.12	16.16
AAPS1350M100A	10	21.8	9.1	12.12
AAPS1350M220A	22	57.4	4.55	6.56
AAPS1350M330A	33	83	3.53	6.05
AAPS1350M470A	47	128	3.03	5.05
AAPS1360M1R0A	1	2.1	28	31
AAPS1360M1R5A	1.5	2.7	16	28
AAPS1360M2R2A	2.2	2.7	16	22
AAPS1360M3R3A	3.3	6.8	17.5	25
AAPS1360M4R7A	4.7	9.9	15.15	24.24
AAPS1360M5R6A	5.6	10.9	13.13	22.73
AAPS1360M6R8A	6.8	13.3	12.12	19.19
AAPS1360M7R8A	7.8	14.4	11.61	18.18
AAPS1360M8R2A	8.2	15.8	11.11	13.63
AAPS1360M100A	10	20.4	10.1	12.62
AAPS1360M120A	12	22.7	9.1	10.1
AAPS1360M150A	15	28.7	8.58	9.1
AAPS1360M180A	18	34.6	7.57	8.08
AAPS1360M220A	22	39	7.07	7.57
AAPS1360M270A	27	55.4	6.06	6.56
AAPS1360M330A	33	74.3	5.55	6.06
AAPS1360M470A	47	89.1	5.05	5.55
AAPS1360M680A	68	138.6	4.04	4.54
AAPS1360M101A	100	198	3.03	3.53
AAPS1360M121A	120	232.6	2.02	3.23
AAPS1360M151A	150	346.5	1.52	2.72
AAPS1770MR47A	0.47	1.03	62	100
AAPS1770M1R0A	1	1.5	42.5	50

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS1770M1R5A	1.5	2.2	33	40
AAPS1770M2R2A	2.2	2.5	29.3	34.34
AAPS1770M3R3A	3.3	2.9	24.7	27.27
AAPS1770M4R7A	4.7	4.67	16.2	24.24
AAPS1770M6R8A	6.8	7.5	14.1	22.22
AAPS1770M8R2A	8.2	8.6	12.6	20.2
AAPS1770M100A	10	9.9	11	18.2
AAPS1770M150A	15	17.3	10.1	14.65
AAPS1770M200A	20	21.6	9.6	12.12
AAPS1770M220A	22	22.7	8.1	11.11
AAPS1770M330A	33	36.6	7	10.1
AAPS1770M470A	47	46.5	6	7.57
AAPS1770M680A	68	84.2	5.6	6.56
AAPS1770M101A	100	128.7	4.1	4.55
AAPS2213M1R0A	1	0.95	70	60
AAPS2213M1R5A	1.5	1.15	62	52
AAPS2213M2R2A	2.2	1.25	58	48
AAPS2213M3R3A	3.3	1.75	49	41
AAPS2213M4R7A	4.7	2.2	47	38
AAPS2213M6R8A	6.8	3.1	40	36
AAPS2213M100A	10	4.15	33	28
AAPS2213M150A	15	6.12	26	23
AAPS2213M220A	22	11	22	15
AAPS2213M330A	33	15.4	19	12
AAPS2213M470A	47	20.8	17	12
AAPS2213M680A	68	29.5	14	12
AAPS2213M820A	82	34.2	12	9
AAPS2213M101A	100	40	11	9