

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.

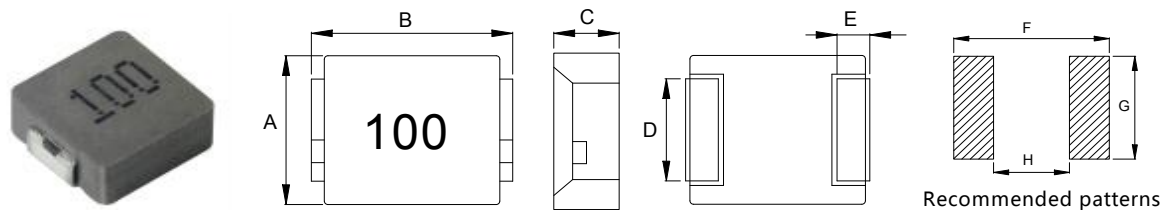
Applications

- 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
AAPS04A12	4.2±0.3	4.8	1.2	2.0	0.8	5.2	2.5	2.2	3000
AAPS04A20	4.2±0.3	4.8	2	2.0	0.8	5.2	2.5	2.2	3000
AAPS05A15	5.2±0.3	5.8	1.5	2.2	1.2	5	2.5	2.2	3000
AAPS05A18	5.2±0.3	5.8	1.8	2.2	1.2	6.0	2.5	2.2	2000
AAPS05A30	5.2±0.3	5.8	3	2.2	1.2	6.0	2.5	2.2	2000
AAPS07A15	6.6±0.3	7.7	1.5	3.0	1.6	8.4	3.5	3.7	2000
AAPS07A18	6.6±0.3	7.7	1.8	3.0	1.6	8.4	3.5	3.7	1500
AAPS07A24	6.6±0.3	7.7	2.4	3.0	1.6	8.4	3.5	3.7	1500
AAPS07A30	6.6±0.3	7.7	3	3.0	1.6	8.4	3.5	3.7	1000
AAPS07A50	6.6±0.3	7.7	5	3.0	1.7	8.4	3.5	3.6	1000
AAPS07D54	7.2±0.3	8.2	5.4	3.0	2.0	9.0	3.5	2.6	500
AAPS08A40	8.2±0.3	9.2	4	5	1.4	9.5	5.5	4	800
AAPS10A30	10.0±0.5	11.5	3	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
AAPS10A40	10.0±0.5	11.5	4.0	3.0	2.0	13.6	4.1	5.4	500
AAPS10A50	10.0±0.5	11.5	5.0	3.0	2.0	13.6	4.1	5.4	500
AAPS10D54	10.0±0.3	11.3	5.4	4.5	2.2	12.88	5.0	4.9	500
AAPS13A50	12.6±0.3	13.9	5.0	See Remark	2.0	14.5	5.0	8.0	500
AAPS13A60	12.6±0.3	13.9	6.0	See Remark	2.0	14.5	5.0	8.0	500
AAPS17A70	16.9±0.3	17.5	7.0	11.9	2.5	20.0	12.3	12.4	200
AAPS22A13	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
AAPS13A50	R22~2R2	3R3~470
AAPS13A60	1R0~2R2	3R3~151

2. Part Number Code

AAPS	04	A	12	LC	M	100
Series Name	Dimensions: L*W	Materials	Dimensions: H	Internal control	Tolerance 20%	Inductance

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.
AAPS04A12LCMR15	0.15	8.9	7.57	15.16
AAPS04A12LCMR22	0.22	10.9	7.05	11.12
AAPS04A12LCMR33	0.33	18.8	6.55	8.48
AAPS04A12LCMR47	0.47	20.8	6.06	6.86
AAPS04A12LCMR68	0.68	35.5	4.74	6.06
AAPS04A12LCM1R0	1	46.5	4.55	5.55
AAPS04A12LCM1R5	1.5	74.3	3.28	4.05
AAPS04A12LCM2R2	2.2	82.7	2.77	3.54
AAPS04A12LCM4R7	4.7	193	1.82	2.83
AAPS04A20LCMR10	0.1	3.9	13.13	22.22
AAPS04A20LCMR22	0.22	6.5	9.6	12.62
AAPS04A20LCMR33	0.33	10.9	10.1	12.13
AAPS04A20LCMR47	0.47	13.8	7.55	9.59
AAPS04A20LCMR56	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 Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS04A20LCMR68	0.68	17.8	7.07	9.1
AAPS04A20LCM1R0	1	26.7	6.05	7.07
AAPS04A20LCM1R2	1.2	26.8	6.06	7.07
AAPS04A20LCM1R5	1.5	45.5	5.05	6.05
AAPS04A20LCM2R2	2.2	57.5	4.55	5.05
AAPS04A20LCM3R3	3.3	86.5	3.35	4.05
AAPS04A20LCM4R7	4.7	104	2.82	3.03
AAPS04A20LCM6R8	6.8	173	2.42	2.52
AAPS04A20LCM100	10	279	1.61	2.22
AAPS04A20LCM150	15	410	1.5	1.8
AAPS05A15LCMR47	0.47	12.6	10	15
AAPS05A15LCMR68	0.68	15.5	8	10.5
AAPS05A15LCM1R0	1	23	6.5	9
AAPS05A15LCM2R2	2.2	52	4	6
AAPS05A15LCM100	10	170	2	3
AAPS05A18LCMR47	0.47	8.9	10.6	15.65
AAPS05A18LCMR56	0.56	9.9	9.6	15.2
AAPS05A18LCM1R0	1	16.8	8.08	9.1
AAPS05A18LCM1R5	1.5	25.7	7.57	9.1
AAPS05A18LCM2R2	2.2	34.7	5.05	6.56
AAPS05A18LCM3R3	3.3	57.4	4.55	5.05
AAPS05A18LCM4R7	4.7	84.1	3.53	4.05
AAPS05A18LCM6R8	6.8	118.9	2.82	3.43
AAPS05A18LCM100	10	153	2.52	3.03
AAPS05A30LCMR10	0.1	2.9	25.3	33.4
AAPS05A30LCMR15	0.15	3.3	17.1	26.7
AAPS05A30LCMR20	0.2	3.8	14.15	14.65
AAPS05A30LCMR33	0.33	5.5	14	18
AAPS05A30LCMR47	0.47	8.1	11.12	12.15
AAPS05A30LCMR68	0.68	11.8	9.1	11.6
AAPS05A30LCM1R0	1	13.8	8.6	11.12
AAPS05A30LCM1R2	1.2	15.8	8.6	11.12
AAPS05A30LCM1R5	1.5	24.7	8.3	8.6
AAPS05A30LCM2R2	2.2	28.8	7.05	7.6
AAPS05A30LCM3R3	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.
AAPS05A30LCM4R7	4.7	59	4.55	5.05
AAPS05A30LCM6R8	6.8	89	3.53	4.05
AAPS05A30LCM100	10	124	3.23	3.54
AAPS05A30LCM150	15	196	2	2.2
AAPS05A30LCM220	22	248	1.7	2.3
AAPS07A15LCMR47	0.47	8.5	16	10
AAPS07A15LCMR56	0.56	11	14	9
AAPS07A15LCMR68	0.68	12	12	8.5
AAPS07A15LCMR82	0.82	17	10	8
AAPS07A15LCM1R0	1	21	9	6
AAPS07A15LCM2R2	2.2	54	7	3.8
AAPS07A15LCM3R3	3.3	63	5.5	3.5
AAPS07A15LCM4R7	4.7	85	5	3.2
AAPS07A15LCM6R8	6.8	135	4	2.5
AAPS07A15LCM100	10	175	3	2
AAPS07A18LCMR47	0.47	8.3	11.6	18.2
AAPS07A18LCMR68	0.68	11.9	9.6	17.2
AAPS07A18LCM1R0	1	15.5	8.6	14.15
AAPS07A18LCM1R5	1.5	25.7	8.08	12.12
AAPS07A18LCM2R2	2.2	34.6	7.05	8.1
AAPS07A18LCM3R3	3.3	49	4.55	6.55
AAPS07A18LCM4R7	4.7	61	4.05	5.05
AAPS07A18LCM6R8	6.8	108	3.03	4.55
AAPS07A24LCMR22	0.22	2.9	21.22	34.35
AAPS07A24LCMR33	0.33	4	18.18	24.75
AAPS07A24LCMR47	0.47	5	15.15	22.22
AAPS07A24LCMR56	0.56	6.4	13.15	17.2
AAPS07A24LCMR68	0.68	6.9	12.15	16.15
AAPS07A24LCM1R0	1	13.3	9.1	16.15
AAPS07A24LCM1R5	1.5	20	9.1	15.15
AAPS07A24LCM2R2	2.2	27.8	7.05	14.15
AAPS07A24LCM3R3	3.3	38.5	5.55	10.1
AAPS07A24LCM4R7	4.7	59.5	5.05	7.55
AAPS07A24LCM6R8	6.8	70	4.05	6.06
AAPS07A24LCM100	10	100	3.13	4.05

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS07A24LCM150	15	158	2.52	3.33
AAPS07A24LCM220	22	227	2.02	2.52
AAPS07A30LCMR10	0.1	1.7	35	43
AAPS07A30LCMR12	0.12	0.95	36	50
AAPS07A30LCMR15	0.15	2.3	26	41
AAPS07A30LCMR22	0.22	3	24.25	34.35
AAPS07A30LCMR24	0.24	3	23.23	26.26
AAPS07A30LCMR33	0.33	3.5	21.2	25.25
AAPS07A30LCMR47	0.47	4.1	18.2	20.2
AAPS07A30LCMR56	0.56	4.3	16.65	18.2
AAPS07A30LCMR68	0.68	5.3	16.16	17.15
AAPS07A30LCMR82	0.82	5.9	14.14	16.15
AAPS07A30LCM1R0	1	7.3	12.12	15.15
AAPS07A30LCM1R5	1.5	12	12.12	14.15
AAPS07A30LCM2R2	2.2	14.8	9.6	10.1
AAPS07A30LCM3R3	3.3	21.8	8.55	9.55
AAPS07A30LCM4R7	4.7	32.5	6.06	9
AAPS07A30LCM6R8	6.8	47.5	5.05	6.05
AAPS07A30LCM8R2	8.2	59.5	5.05	6.05
AAPS07A30LCM100	10	66.3	4.55	5.55
AAPS07A30LCM150	15	113	3.03	4.55
AAPS07A30LCM220	22	170	2.5	3.03
AAPS07A30LCM330	33	270	2.02	2.52
AAPS07A30LCM470	47	385	1.5	2
AAPS07A50LCMR22	0.22	2.5	30.03	35.35
AAPS07A50LCMR47	0.47	4.8	20.02	21.21
AAPS07A50LCMR56	0.56	5.4	18.18	18.18
AAPS07A50LCMR68	0.68	5.9	16.16	16.16
AAPS07A50LCMR82	0.82	7.3	14.15	15.15
AAPS07A50LCM1R0	1	6.4	14.15	18.18
AAPS07A50LCM1R5	1.5	7.4	12.12	15.65
AAPS07A50LCM1R8	1.8	12	10	12
AAPS07A50LCM2R2	2.2	12.3	10.1	14.14
AAPS07A50LCM3R3	3.3	21.7	8.58	12.12
AAPS07A50LCM4R7	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 Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS07A50LCM6R8	6.8	41	5.5	7.07
AAPS07A50LCM8R2	8.2	48	5.05	6.7
AAPS07A50LCM100	10	54.3	4.55	6.55
AAPS07A50LCM150	15	85	3.1	4.5
AAPS07A50LCM220	22	138	2.52	4.04
AAPS07A50LCM330	33	178	2.32	3.53
AAPS07D54LCM1R5	1.5	7.3	11.4	16.3
AAPS07D54LCM2R2	2.2	11.4	9.7	14.8
AAPS07D54LCM3R3	3.3	15.4	8	13.5
AAPS07D54LCM4R7	4.7	20.9	7	13.1
AAPS07D54LCM6R8	6.8	26.6	6.1	10.2
AAPS07D54LCM8R2	8.2	31.9	5.6	9
AAPS07D54LCM100	10	38	5.2	8
AAPS07D54LCM150	15	66	3.8	6.9
AAPS07D54LCM220	22	93.5	3.3	6.3
AAPS07D54LCM330R	33	127.6	3.2	4.9
AAPS07D54LCM470R	47	171.6	2.4	4.1
AAPS07D54LCM680R	68	240	2.1	4.3
AAPS07D54LCM101R	100	345	1.8	3.3
AAPS08A40LCMR22	0.22	1.8	36	60
AAPS08A40LCMR33	0.33	2.4	30	45
AAPS08A40LCMR47	0.47	2.8	28	42
AAPS08A40LCMR56	0.56	3.2	24	26
AAPS08A40LCMR68	0.68	3.8	23	24
AAPS08A40LCMR82	0.82	4.4	21	21
AAPS08A40LCM1R0	1	4.62	19	19
AAPS08A40LCM1R5	1.5	7.6	17	17
AAPS08A40LCM1R8	1.8	11	15	15
AAPS08A40LCM2R2	2.2	11.4	14	14
AAPS08A40LCM3R3	3.3	15	12	12.5
AAPS08A40LCM4R7	4.7	26.5	9.5	11.5
AAPS08A40LCM5R6	5.6	30	9	11
AAPS08A40LCM6R8	6.8	36.8	8	9
AAPS08A40LCM8R2	8.2	46	7	8.7
AAPS08A40LCM100	10	59	6.5	8

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS08A40LCM150	15	71	5.4	5.5
AAPS08A40LCM220	22	113	4.8	5
AAPS08A40LCM330	33	156	3.5	3.5
AAPS08A40LCM470	47	225	2.9	3.1
AAPS10A30LCMR22	0.22	1.2	33	50
AAPS10A30LCMR33	0.33	1.6	23	32
AAPS10A30LCMR36	0.36	1.6	23	28
AAPS10A30LCMR47	0.47	2.5	22	26
AAPS10A30LCMR82	0.82	3.7	18	23
AAPS10A30LCM1R0	1	6	15	21
AAPS10A30LCM2R2	2.2	9	11	14
AAPS10A30LCM3R3	3.3	16	9	12
AAPS10A30LCM4R7	4.7	24.5	7	10
AAPS10A30LCM8R2	8.2	45	5	7
AAPS10A30LCM100	10	50	4	7
AAPS10A30LCM330	33	160	2.5	4
AAPS10A40LCMR15	0.15	0.6	45.45	75.75
AAPS10A40LCMR22	0.22	1	35.35	60.6
AAPS10A40LCMR30	0.3	1	35.35	50.5
AAPS10A40LCMR36	0.36	1.2	30.3	50.5
AAPS10A40LCMR47	0.47	1.6	30.3	40.4
AAPS10A40LCMR56	0.56	1.7	25.25	33.33
AAPS10A40LCMR68	0.68	2.3	23.23	30.3
AAPS10A40LCMR80	0.8	2.6	23.23	29.3
AAPS10A40LCM1R0	1	3.2	19.2	28.28
AAPS10A40LCM1R5	1.5	4.1	16.15	26.25
AAPS10A40LCM2R2	2.2	6.9	12.12	18.18
AAPS10A40LCM3R3	3.3	11.6	11.1	16.15
AAPS10A40LCM4R7	4.7	19.9	9.1	15.15
AAPS10A40LCM5R6	5.6	22	8.5	12
AAPS10A40LCM6R8	6.8	24.7	8.58	12.12
AAPS10A40LCM8R2	8.2	26.5	8.08	9.1
AAPS10A40LCM100	10	29.7	7.87	8.6
AAPS10A40LCM150	15	44.5	6.55	7.07
AAPS10A40LCM220	22	65.3	5.05	5.55

AAPS Series

Part Number	Inductance (μ H) @100KHz/1V	DC Resistance (m Ω) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS10A40LCM330	33	91	4.44	5.05
AAPS10A40LCM470	47	143	3.33	3.53
AAPS10A40LCM680	68	193	2.52	3.03
AAPS10A40LCM101	100	340	2.2	2.3
AAPS10A50LCMR22	0.22	0.8	37	65
AAPS10A50LCM1R0	1	2.8	23.5	30
AAPS10A50LCM2R2	2.2	6	14	19
AAPS10A50LCM3R3	3.3	9.8	14	16
AAPS10A50LCM4R7	4.7	14	11	15
AAPS10A50LCM5R6	5.6	17	9.7	14
AAPS10A50LCM6R8	6.8	18.5	9.2	14
AAPS10A50LCM100	10	28	8.2	10
AAPS10A50LCM150	15	42	6.5	7.5
AAPS10A50LCM220	22	50	5.5	6
AAPS10A50LCM330	33	86	4.8	5.2
AAPS10A50LCM470	47	127	3.7	4.5
AAPS10A50LCM680	68	180	2.7	3.5
AAPS10A50LCM101	100	290	2.1	2.8
AAPS10D54LCMR68	0.68	2.22	32	46
AAPS10D54LCM1R0	1	2.76	30	37
AAPS10D54LCM1R5	1.5	4.2	24.8	26.8
AAPS10D54LCM2R2	2.2	4.9	23	25
AAPS10D54LCM3R3	3.3	7.4	18.7	19
AAPS10D54LCM4R7	4.7	10	14.5	15.7
AAPS10D54LCM6R8	6.8	14	12	13.3
AAPS10D54LCM100	10	24.2	8.7	12.7
AAPS10D54LCM150	15	31.3	7.6	9.2
AAPS10D54LCM220	22	50	6	8.8
AAPS10D54LCM330	33	75.3	4.8	7.6
AAPS10D54LCM470	47	103	4.1	4.9
AAPS10D54LCM680	68	152	3.3	4.2
AAPS10D54LCM101	100	234	2.8	3.5
AAPS13A50LCMR22	0.22	0.7	50.5	75.75
AAPS13A50LCMR36	0.36	0.8	42.4	50.5
AAPS13A50LCMR47	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.
AAPS13A50LCMR68	0.68	1.5	33.33	46.46
AAPS13A50LCMR82	0.82	1.6	30.3	39.39
AAPS13A50LCM1R0	1	2.2	26.26	35.35
AAPS13A50LCM1R5	1.5	3.1	23.23	33.33
AAPS13A50LCM2R2	2.2	4.9	15.15	24.25
AAPS13A50LCM3R3	3.3	6.9	14.15	22.23
AAPS13A50LCM4R7	4.7	8.9	13.13	21.2
AAPS13A50LCM6R8	6.8	17.9	12.12	16.16
AAPS13A50LCM100	10	21.8	9.1	12.12
AAPS13A50LCM220	22	57.4	4.55	6.56
AAPS13A50LCM330	33	83	3.53	6.05
AAPS13A50LCM470	47	128	3.03	5.05
AAPS13A60LCM1R0	1	2.1	28	31
AAPS13A60LCM1R5	1.5	2.7	16	28
AAPS13A60LCM2R2	2.2	2.7	16	22
AAPS13A60LCM3R3	3.3	6.8	17.5	25
AAPS13A60LCM4R7	4.7	9.9	15.15	24.24
AAPS13A60LCM5R6	5.6	10.9	13.13	22.73
AAPS13A60LCM6R8	6.8	13.3	12.12	19.19
AAPS13A60LCM7R8	7.8	14.4	11.61	18.18
AAPS13A60LCM8R2	8.2	15.8	11.11	13.63
AAPS13A60LCM100	10	20.4	10.1	12.62
AAPS13A60LCM120	12	22.7	9.1	10.1
AAPS13A60LCM150	15	28.7	8.58	9.1
AAPS13A60LCM180	18	34.6	7.57	8.08
AAPS13A60LCM220	22	39	7.07	7.57
AAPS13A60LCM270	27	55.4	6.06	6.56
AAPS13A60LCM330	33	74.3	5.55	6.06
AAPS13A60LCM470	47	89.1	5.05	5.55
AAPS13A60LCM680	68	138.6	4.04	4.54
AAPS13A60LCM101	100	198	3.03	3.53
AAPS13A60LCM121	120	232.6	2.02	3.23
AAPS13A60LCM151	150	346.5	1.52	2.72
AAPS17A70LCMR47	0.47	1.03	62	100
AAPS17A70LCM1R0	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.
AAPS17A70LCM1R5	1.5	2.2	33	40
AAPS17A70LCM2R2	2.2	2.5	29.3	34.34
AAPS17A70LCM3R3	3.3	2.9	24.7	27.27
AAPS17A70LCM4R7	4.7	4.67	16.2	24.24
AAPS17A70LCM6R8	6.8	7.5	14.1	22.22
AAPS17A70LCM8R2	8.2	8.6	12.6	20.2
AAPS17A70LCM100	10	9.9	11	18.2
AAPS17A70LCM150	15	17.3	10.1	14.65
AAPS17A70LCM200	20	21.6	9.6	12.12
AAPS17A70LCM220	22	22.7	8.1	11.11
AAPS17A70LCM330	33	36.6	7	10.1
AAPS17A70LCM470	47	46.5	6	7.57
AAPS17A70LCM680	68	84.2	5.6	6.56
AAPS17A70LCM101	100	128.7	4.1	4.55
AAPS22A13LCM1R0	1	0.95	70	60
AAPS22A13LCM1R5	1.5	1.15	62	52
AAPS22A13LCM2R2	2.2	1.25	58	48
AAPS22A13LCM3R3	3.3	1.75	49	41
AAPS22A13LCM4R7	4.7	2.2	47	38
AAPS22A13LCM6R8	6.8	3.1	40	36
AAPS22A13LCM100	10	4.15	33	28
AAPS22A13LCM150	15	6.12	26	23
AAPS22A13LCM220	22	11	22	15
AAPS22A13LCM330	33	15.4	19	12
AAPS22A13LCM470	47	20.8	17	12
AAPS22A13LCM680	68	29.5	14	12
AAPS22A13LCM820	82	34.2	12	9
AAPS22A13LCM101	100	40	11	9