

AAPS-F Series

Features

- Qualified to AEC-Q200.
- Halogen Free.
- High performance (Isat) realized by metal dust core.
- Low loss realized with low DCR
- 100% lead (Pb) free meet RoHS standard

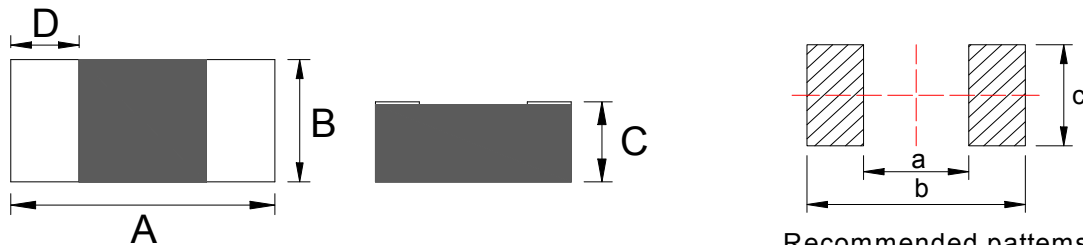
Applications

- Automotive applications.

Test Equipment and Conditions

- All test data is referenced to 25°C ambient.
- Operating temperature range -40°C to +125°C (Including self - temperature rise) (AAPS02--32 size)
- Operating temperature range -55°C to +155°C (Including self - temperature rise) (AAPS04-15 size)
- DC current(Irms)that will cause an approximate ΔT of 40°C.
- DC current(Isat)that will cause Lo to drop approximately 40%.
- For AAPS25 size project ,absolute maximum voltage 20VDC;
- Above AAPS04 size project, absolute maximum voltage 55VDC.

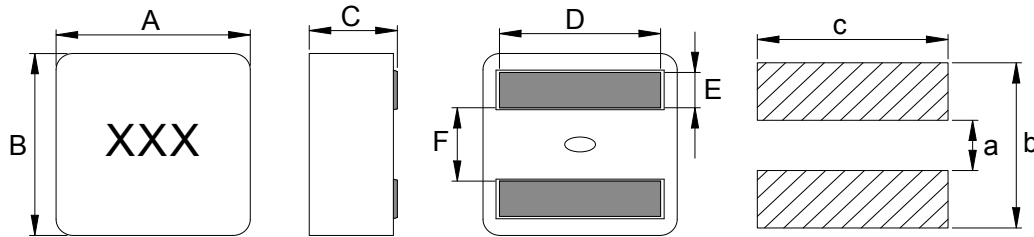
External Dimensions (Unit:mm)



Recommended patterns

TYPE	A	B	C Max	D Typ	E	F	a Typ	b Typ	c Typ	Q'TY/Reel
AAPS201610	2.0±0.2	1.6±0.2	1	0.6	/	/	0.9	2.3	1.9	3000
AAPS252010	2.5±0.2	2.0±0.2	1.05	0.7	/	/	1.2	2.8	2.3	3000
AAPS252012	2.5±0.2	2.0±0.2	1.25	0.7	/	/	1.2	2.8	2.3	3000
AAPS322512	3.2±0.2	2.5±0.2	1.25	0.7	/	/	1.8	3.7	2.8	2000

External Dimensions (Unit:mm)



Recommended patterns

TYPE	A	B	C Max	D Typ	E	F	a Typ	b Typ	c Typ	Q'TY/Reel
AAPS0420	4.1±0.2	4.1±0.2	2.15	3.4	0.88±0.3	1.6±0.3	1.4	3.4	3.8	3000
AAPS0430	4.1±0.25	4.1±0.25	3.1	3.4	0.88±0.3	1.6±0.3	1.4	3.4	3.8	2000
AAPS0520	5.5±0.2	5.3±0.2	2.15	4.3	1.1±0.3	2.3±0.3	2	4.5	4.7	3000
AAPS0530	5.5±0.2	5.3±0.2	3.1	4.3	1.1±0.3	2.3±0.3	2	4.5	4.7	2000
AAPS0550	5.5±0.2	5.3±0.2	5	4.3	1.1±0.3	2.3±0.3	2	4.5	4.7	1500
AAPS0630	6.6±0.2	6.4±0.2	3.1	5.3	1.4±0.3	2.6±0.3	2.5	5.6	5.6	1000
AAPS0650	6.6±0.2	6.4±0.2	5	5.3	1.4±0.3	2.6±0.3	2.5	5.6	5.6	800
AAPS0660	6.6±0.2	6.4±0.2	6	5.3	1.4±0.3	2.6±0.3	2.5	5.6	5.6	750
AAPS0720	7.8±0.25	7.6±0.2	2	6.5	1.75±0.3	3.15±0.3	2.8	7.4	7.2	2000
AAPS0730	7.8±0.25	7.6±0.2	3.1	6.5	1.75±0.3	3.15±0.3	2.8	7.4	7.2	1500
AAPS0770	7.8±0.25	7.6±0.25	7	6.5	1.75±0.3	3.15±0.3	2.8	7.4	7.2	700
AAPS0880	8.9±0.3	8.5±0.3	8	7	1.8±0.2	3.5±0.3	2.7	7.8	8	450
AAPS1030	11.9±0.3	11.0±0.3	3.1	9	2.4±0.2	4.4±0.3	3.7	10.5	11	1000
AAPS1060	11.9±0.3	11.0±0.3	6	9	2.4±0.2	4.4±0.3	3.7	10.5	11	500
AAPS1010	11.9±0.3	11.0±0.3	10	9	2.4±0.2	4.2±0.3	3.7	10.5	11	300
AAPS1580	16.5±0.3	15.5±0.3	8	13.2	3.2±0.3	7.4±0.5	6	15	15	200
AAPS1510	16.5±0.3	15.5±0.3	10	13.2	3.2±0.3	7.4±0.5	6	15	15	150
AAPS1513	16.5±0.3	15.5±0.3	13	13.2	3.2±0.3	7.0±0.5	6	15	15	100

2. Part Number Code

AAPS	201610	M	100	F
Series Name	Dimensions: L*W*H	Tolerance 20%	Inductance	Materials

AAPS-F Series

Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS201610MR24F	0.24	1MHz/1V	19	6	9
AAPS201610MR33F	0.33	1MHz/1V	23	5.2	7
AAPS201610MR47F	0.47	1MHz/1V	25	5	6.8
AAPS201610M1R0F	1	1MHz/1V	48	3.6	4.5
AAPS201610M1R5F	1.5	1MHz/1V	80	2.7	3.8
AAPS201610M2R2F	2.2	1MHz/1V	120	2.3	3.6
AAPS252010MR22F	0.22	1MHz/1V	18	8.5	11.5
AAPS252010MR33F	0.33	1MHz/1V	20	7.5	7.8
AAPS252010MR47F	0.47	1MHz/1V	25	6.5	6.9
AAPS252010MR68F	0.68	1MHz/1V	40	5.2	6.7
AAPS252010M1R0F	1	1MHz/1V	52	4.2	5.3
AAPS252010M1R5F	1.5	1MHz/1V	85	3.2	3.8
AAPS252010M2R2F	2.2	1MHz/1V	110	3	3.6
AAPS252010M3R3F	3.3	1MHz/1V	170	2	2.6
AAPS252010M4R7F	4.7	1MHz/1V	262	1.9	2.5
AAPS252012MR10F	0.1	1MHz/1V	11	9	16
AAPS252012MR15F	0.15	1MHz/1V	12.8	8.8	15.5
AAPS252012MR22F	0.22	1MHz/1V	13.5	8.6	10
AAPS252012MR33F	0.33	1MHz/1V	18	8.5	9.5
AAPS252012MR47F	0.47	1MHz/1V	20	5.2	9
AAPS252012MR68F	0.68	1MHz/1V	30	4.8	6.8
AAPS252012M1R0F	1	1MHz/1V	42	4.5	6.4
AAPS252012M1R5F	1.5	1MHz/1V	60	3.1	4.9
AAPS252012M2R2F	2.2	1MHz/1V	84	3	4
AAPS252012M3R3F	3.3	1MHz/1V	130	2.8	3.8
AAPS252012M4R7F	4.7	1MHz/1V	200	2.4	3.1
AAPS322512MR15F	0.15	1MHz/1V	12	8.9	13.4
AAPS322512MR33F	0.33	1MHz/1V	16	8.3	11.5
AAPS322512MR47F	0.47	1MHz/1V	22	6.5	10
AAPS322512MR68F	0.68	1MHz/1V	26	5.5	6.8
AAPS322512M1R0F	1	1MHz/1V	32	4.6	6.5
AAPS322512M1R5F	1.5	1MHz/1V	48	4.2	4.8
AAPS322512M2R2F	2.2	1MHz/1V	68	3.3	4.5
AAPS322512M3R3F	3.3	1MHz/1V	108	2.6	3.4

AAPS-F Series

Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS322512M4R7F	4.7	1MHz/1V	157	2.2	3.1
AAPS322512M6R8F	6.8	1MHz/1V	220	1.5	2.5
AAPS0420MR10F	0.1	100KHz/0.1V	2.42	18	33
AAPS0420MR22F	0.22	100KHz/0.1V	4.6	16.8	18.8
AAPS0420MR36F	0.36	100KHz/0.1V	6.3	14.5	15
AAPS0420MR40F	0.4	100KHz/0.1V	7.73	14	13.5
AAPS0420MR47F	0.47	100KHz/0.1V	8.58	12.5	13
AAPS0420MR56F	0.56	100KHz/0.1V	9.3	12	12.6
AAPS0420MR60F	0.6	100KHz/0.1V	9.52	11.7	12.3
AAPS0420MR72F	0.72	100KHz/0.1V	11.6	10.5	10.6
AAPS0420M1R0F	1	100KHz/0.1V	14.6	9.6	8.8
AAPS0420M1R2F	1.2	100KHz/0.1V	17.9	9	7.8
AAPS0420M1R5F	1.5	100KHz/0.1V	23.5	7.6	7.4
AAPS0420M1R8F	1.8	100KHz/0.1V	28	7	7
AAPS0420M2R2F	2.2	100KHz/0.1V	38.7	5.6	6
AAPS0430MR75F	0.75	100KHz/0.1V	10.8	10	9
AAPS0430M1R0F	1	100KHz/0.1V	12.76	10	10
AAPS0430M2R2F	2.2	100KHz/0.1V	20.8	7.2	7
AAPS0430M3R3F	3.3	100KHz/0.1V	28.6	6.6	5.5
AAPS0430M4R7F	4.7	100KHz/0.1V	44.1	5.1	4.5
AAPS0430M6R8F	6.8	100KHz/0.1V	74.1	3.9	3.6
AAPS0520MR15F	0.15	100KHz/0.1V	4.6	18.8	27
AAPS0520MR16F	0.16	100KHz/0.1V	4.6	18.8	27
AAPS0520MR33F	0.33	100KHz/0.1V	7	14.4	24
AAPS0520MR47F	0.47	100KHz/0.1V	8.1	14.1	20
AAPS0520MR56F	0.56	100KHz/0.1V	9.5	13.9	16
AAPS0520MR68F	0.68	100KHz/0.1V	10.2	13.4	14
AAPS0520MR80F	0.8	100KHz/0.1V	11.8	13	13.5
AAPS0520MR82F	0.82	100KHz/0.1V	12.7	12	13
AAPS0520M1R0F	1	100KHz/0.1V	13.8	10.5	12.8
AAPS0520M1R2F	1.2	100KHz/0.1V	16.3	9.4	12.2
AAPS0520M1R5F	1.5	100KHz/0.1V	18.7	8.8	11.7
AAPS0530MR15F	0.15	100KHz/0.1V	2.31	22.2	32.5
AAPS0530MR16F	0.16	100KHz/0.1V	2.33	22.2	32

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Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
AAPS0530MR33F	0.33	100KHz/0.1V	3.52	19.2	26
AAPS0530MR47F	0.47	100KHz/0.1V	4.13	18.4	24
AAPS0530MR56F	0.56	100KHz/0.1V	4.52	17.7	20.2
AAPS0530MR60F	0.6	100KHz/0.1V	4.52	17.7	20
AAPS0530MR80F	0.8	100KHz/0.1V	5.65	13.1	18
AAPS0530MR82F	0.82	100KHz/0.1V	5.78	12.9	17.6
AAPS0530M1R0F	1	100KHz/0.1V	7.6	12.2	14.3
AAPS0530M1R2F	1.2	100KHz/0.1V	9.7	11	13.5
AAPS0530M1R5F	1.5	100KHz/0.1V	11.2	10.5	12.5
AAPS0530M1R8F	1.8	100KHz/0.1V	12.7	10.1	11.3
AAPS0530M2R2F	2.2	100KHz/0.1V	14.5	9.7	9
AAPS0530M3R3F	3.3	100KHz/0.1V	23.1	8.1	8.7
AAPS0530M4R7F	4.7	100KHz/0.1V	36.3	5.9	7
AAPS0550M5R6F	5.6	100KHz/0.1V	24.2	7.2	7.2
AAPS0550M6R8F	6.8	100KHz/0.1V	28.6	6.4	6.6
AAPS0550M8R2F	8.2	100KHz/0.1V	32.5	6.1	6.1
AAPS0550M100F	10	100KHz/0.1V	43	5	5.4
AAPS0630MR18F	0.18	100KHz/0.1V	1.75	32	39
AAPS0630MR33F	0.33	100KHz/0.1V	2.5	25	30
AAPS0630MR56F	0.56	100KHz/0.1V	3.31	22	29
AAPS0630MR68F	0.68	100KHz/0.1V	5.17	20	25
AAPS0630M1R0F	1	100KHz/0.1V	6.05	18	23
AAPS0630M1R2F	1.2	100KHz/0.1V	7.4	16	22
AAPS0630M1R5F	1.5	100KHz/0.1V	9.13	15	20
AAPS0630M1R8F	1.8	100KHz/0.1V	10.2	14	18.2
AAPS0630M2R2F	2.2	100KHz/0.1V	12.2	10	15.9
AAPS0630M3R3F	3.3	100KHz/0.1V	20.8	8	12.2
AAPS0630M4R5F	4.5	100KHz/0.1V	25.3	7	10
AAPS0630M4R7F	4.7	100KHz/0.1V	26	6	9
AAPS0650MR82F	0.82	100KHz/0.1V	4.18	21	20
AAPS0650M1R0F	1	100KHz/0.1V	4.52	20	18
AAPS0650M1R2F	1.2	100KHz/0.1V	5.83	18	16
AAPS0650M1R5F	1.5	100KHz/0.1V	6.3	17	14.5
AAPS0650M1R8F	1.8	100KHz/0.1V	7.1	16	13.5

AAPS-F Series

Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0650M2R2F	2.2	100KHz/0.1V	8.5	13	12
AAPS0650M3R3F	3.3	100KHz/0.1V	12.5	11	10
AAPS0650M4R3F	4.3	100KHz/0.1V	16.2	9	8.5
AAPS0650M4R7F	4.7	100KHz/0.1V	18.4	8.5	8
AAPS0650M5R6F	5.6	100KHz/0.1V	22	7	8.3
AAPS0650M6R8F	6.8	100KHz/0.1V	25.4	6.6	7
AAPS0650M8R2F	8.2	100KHz/0.1V	31.5	6.2	6.8
AAPS0660M1R0F	1	100KHz/0.1V	4.4	21	24
AAPS0660M1R5F	1.5	100KHz/0.1V	6.1	17.5	20
AAPS0660M2R2F	2.2	100KHz/0.1V	8.1	14	16.5
AAPS0660M3R3F	3.3	100KHz/0.1V	12.3	12	13
AAPS0660M4R7F	4.7	100KHz/0.1V	14.4	11	10.5
AAPS0660M5R6F	5.6	100KHz/0.1V	15.9	10	9.9
AAPS0660M6R8F	6.8	100KHz/0.1V	20.8	9	9.2
AAPS0660M8R2F	8.2	100KHz/0.1V	26.4	8	8.4
AAPS0660M100F	10	100KHz/0.1V	29.82	7	7.6
AAPS0660M150F	15	100KHz/0.1V	43.75	6	5.8
AAPS0660M220F	22	100KHz/0.1V	60.63	5	5.6
AAPS0720MR27F	0.27	100KHz/0.1V	3.5	21	35
AAPS0720MR31F	0.31	100KHz/0.1V	4.8	20	34
AAPS0720MR33F	0.33	100KHz/0.1V	4.8	19	34
AAPS0720MR47F	0.47	100KHz/0.1V	6.2	17	28
AAPS0720MR68F	0.68	100KHz/0.1V	9.2	13	25
AAPS0720M1R0F	1	100KHz/0.1V	10.8	11	23
AAPS0730M1R0F	1	100KHz/0.1V	5	21.8	28
AAPS0730M1R5F	1.5	100KHz/0.1V	8.25	15.3	23.5
AAPS0730M2R2F	2.2	100KHz/0.1V	13.7	13	17
AAPS0730M2R7F	2.7	100KHz/0.1V	15.4	11.4	13.5
AAPS0730M3R3F	3.3	100KHz/0.1V	18	10	13
AAPS0730M4R7F	4.7	100KHz/0.1V	26.7	9	12.2
AAPS0730M5R6F	5.6	100KHz/0.1V	33.2	7.3	11.5
AAPS0730M6R8F	6.8	100KHz/0.1V	42.5	6.8	11
AAPS0730M8R2F	8.2	100KHz/0.1V	48.73	5.9	9
AAPS0770M3R3F	3.3	100KHz/0.1V	9.42	15.1	19.4

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Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS0770M4R7F	4.7	100KHz/0.1V	14.26	13.6	15.2
AAPS0770M6R8F	6.8	100KHz/0.1V	19.6	9.2	12.8
AAPS0880M1R8F	1.8	100KHz/0.1V	4	24	28
AAPS0880M2R2F	2.2	100KHz/0.1V	4.3	21.5	25
AAPS0880M3R3F	3.3	100KHz/0.1V	7.3	18	23
AAPS0880M4R7F	4.7	100KHz/0.1V	9.8	14.6	19
AAPS0880M6R8F	6.8	100KHz/0.1V	14.3	11.3	14.5
AAPS0880M100F	10	100KHz/0.1V	22.9	8.7	11
AAPS1030MR28F	0.28	100KHz/0.1V	1.6	35	65
AAPS1030MR56F	0.56	100KHz/0.1V	2.75	32	44
AAPS1030MR82F	0.82	100KHz/0.1V	4.1	25	38
AAPS1030MR90F	0.9	100KHz/0.1V	4.2	24	36
AAPS1030M1R0F	1	100KHz/0.1V	4.95	23	35
AAPS1030M1R5F	1.5	100KHz/0.1V	4.2	18	30
AAPS1060MR68F	0.68	100KHz/0.1V	1.5	34	55
AAPS1060M1R0F	1	100KHz/0.1V	2.32	28.5	48
AAPS1060M1R2F	1.2	100KHz/0.1V	2.64	26.5	45
AAPS1060M1R5F	1.5	100KHz/0.1V	3.3	24.5	40
AAPS1060M2R2F	2.2	100KHz/0.1V	4.84	20	35
AAPS1060M3R3F	3.3	100KHz/0.1V	7.7	16.8	28
AAPS1060M4R7F	4.7	100KHz/0.1V	10.72	14	25
AAPS1010M1R0F	1	100KHz/0.1V	1.2	40	50
AAPS1010M2R2F	2.2	100KHz/0.1V	2.8	32	34
AAPS1010M3R3F	3.3	100KHz/0.1V	4.1	25	27.4
AAPS1010M4R7F	4.7	100KHz/0.1V	5.7	24	25.4
AAPS1010M5R6F	5.6	100KHz/0.1V	7.2	21.2	23.6
AAPS1010M6R8F	6.8	100KHz/0.1V	8.9	18.5	21.8
AAPS1010M8R2F	8.2	100KHz/0.1V	12.4	17.1	18.3
AAPS1010M100F	10	100KHz/0.1V	13.8	15.5	17.5
AAPS1010M150F	15	100KHz/0.1V	19.3	13.8	15.5
AAPS1580M2R0F	2	100KHz/0.1V	2.2	40	52
AAPS1580M2R2F	2.2	100KHz/0.1V	2.5	37	49
AAPS1580M3R0F	3	100KHz/0.1V	3	34.5	41
AAPS1580M4R2F	4.2	100KHz/0.1V	4.7	27	33

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Part Number	Inductance (uH)±20%	Test Frequency	DC Resistance (mΩ) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
AAPS1580M4R7F	4.7	100KHz/0.1V	5.2	26.5	32
AAPS1580M5R3F	5.3	100KHz/0.1V	5.3	26	31
AAPS1580M6R2F	6.2	100KHz/0.1V	6.5	23	31
AAPS1580M7R2F	7.2	100KHz/0.1V	7.2	21	29
AAPS1580M8R2F	8.2	100KHz/0.1V	7.9	19	25
AAPS1510M4R7F	4.7	100KHz/0.1V	3.8	29	39
AAPS1510M5R6F	5.6	100KHz/0.1V	4.2	28	37
AAPS1510M6R8F	6.8	100KHz/0.1V	4.6	26	36
AAPS1510M8R2F	8.2	100KHz/0.1V	7.2	24	30
AAPS1510M100F	10	100KHz/0.1V	8.6	22	26.5
AAPS1510M150F	15	100KHz/0.1V	11.5	18	23
AAPS1510M220F	22	100KHz/0.1V	15.8	14	18.7
AAPS1510M330F	33	100KHz/0.1V	20	12	16.7
AAPS1513M4R7F	4.7	100KHz/0.1V	3.3	31	44
AAPS1513M5R6F	5.6	100KHz/0.1V	3.9	29	40
AAPS1513M6R8F	6.8	100KHz/0.1V	4.2	27	37
AAPS1513M8R2F	8.2	100KHz/0.1V	5.74	26	33
AAPS1513M100F	10	100KHz/0.1V	7	25	30
AAPS1513M150F	15	100KHz/0.1V	7.5	22	25.5
AAPS1513M220F	22	100KHz/0.1V	13.86	17	22
AAPS1513M330F	33	100KHz/0.1V	22.2	14	19