APS Series

Features

- 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.

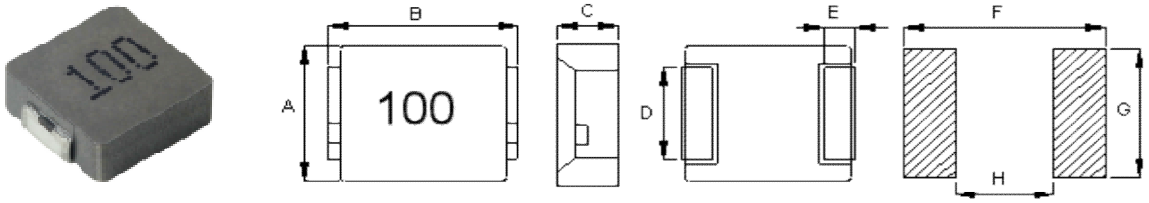
Applications

- Notebook/Desktop/Server applications.
- Low profile, high current power supplies.
- DC/DC converter for Field Programmable Gate Array(FPGA).

Test Equipment and Conditions

- All test data is referenced to 25℃ ambient.
- Operating temperature range -40℃ to +125℃.(Including self - temperature rise)
- DC current(Irms)that will cause an approximate△T of 40℃.
- DC current(Isat)that will cause Lo to drop approximately 40%.
- Absolute maximum voltage 30VDC.

External Dimensions (Unit:mm)



TYPE	A	B Max	C Max	D typ	E typ	F typ	G typ	H typ	Q'TY/Reel
APS0410	4.1±0.2	4.3	1.0	1.8	0.8	4.4	2.2	2.2	5000
APS0412	4.2±0.3	4.8	1.2	2.0	0.8	5.2	2.5	2.2	3000
APS0420	4.2±0.3	4.8	2.0	2.0	0.8	5.2	2.5	2.2	3000
APS0515	5.2±0.3	5.8	1.5	2.2	1.2	5.0	2.5	2.2	3000
APS0518	5.2±0.3	5.8	1.8	2.2	1.2	6.0	2.5	2.2	2000
APS0530	5.2±0.3	5.8	3.0	2.2	1.2	6.0	2.5	2.2	2000
APS0615	6.6±0.3	7.7	1.5	3.0	1.6	8.4	3.5	3.7	2000
APS0618	6.6±0.3	7.7	1.8	3.0	1.6	8.4	3.5	3.7	1500
APS0624	6.6±0.3	7.7	2.4	3.0	1.6	8.4	3.5	3.7	1500
APS0630	6.6±0.3	7.7	3.0	3.0	1.6	8.4	3.5	3.7	1000
APS0650	6.6±0.3	7.7	5.0	3.0	1.7	8.4	3.5	3.6	1000

TYPE	A	B Max	C Max	D typ	E typ	F typ	G typ	H typ	Q'TY/Reel
APS0754	7.2±0.3	8.2	5.4	3.0	2.0	9.0	3.5	2.6	500
APS0840	8.2±0.3	9.2	4.0	5.0	1.4	9.5	5.5	4.0	800
APS1020	10.0±0.5	11.5	2.0	3.0	2.0	13.6	4.1	5.4	1000
APS1030	10.0±0.5	11.5	3.0	3.0	2.0	13.6	4.1	5.4	1000
APS1040	10.0±0.5	11.5	4.0	3.0	2.0	13.6	4.1	5.4	500
APS1050	10.0±0.5	11.5	5.0	3.0	2.0	13.6	4.1	5.4	500
APS1054	10.0±0.3	11.3	5.4	4.5	2.2	12.9	5.0	4.9	500
APS1350	12.6±0.3	13.9	5.0	See Remark	2.0	14.5	5.0	8.0	500
APS1360	12.6±0.3	13.9	6.0	See Remark	2.0	14.5	5.0	8.0	500
APS1770	16.9±0.3	17.5	7.0	11.9	2.5	20.0	12.3	12.4	200
APS2213	22.0±0.3	24.0	13.0	19.0	5.0	24.0	19.6	12.5	80

Remark：

TYPE	D(mm)Typ.	
	3.85	5.0
APS1350	R22~2R2	3R3~470
APS1360	1R0~2R2	3R3~151

Part Number Code

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

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0410M2R2A	2.2	100	3.4	4.3
APS0410M4R7A	4.7	160	2.6	2.5
APS0410M100A	10	336	1.5	1.8
APS0412MR15A	0.15	8.9	7.57	15.16
APS0412MR22A	0.22	10.9	7.05	11.12
APS0412MR33A	0.33	18.8	6.55	8.48
APS0412MR47A	0.47	20.8	6.06	6.86
APS0412MR68A	0.68	35.5	4.74	6.06
APS0412M1R0A	1	46.5	4.55	5.55

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0412M1R5A	1.5	74.3	3.28	4.05
APS0412M2R2A	2.2	82.7	2.77	3.54
APS0412M4R7A	4.7	193	1.82	2.83
APS0420MR10A	0.1	3.9	13.13	22.22
APS0420MR22A	0.22	6.5	9.6	12.62
APS0420MR33A	0.33	10.9	10.1	12.13
APS0420MR47A	0.47	13.8	7.55	9.59
APS0420MR56A	0.56	15.8	7.07	10.11
APS0420MR68A	0.68	17.8	7.07	9.1
APS0420M1R0A	1	26.7	6.05	7.07
APS0420M1R2A	1.2	26.8	6.06	7.07
APS0420M1R5A	1.5	45.5	5.05	6.05
APS0420M2R2A	2.2	57.5	4.55	5.05
APS0420M3R3A	3.3	86.5	3.35	4.05
APS0420M4R7A	4.7	104	2.82	3.03
APS0420M5R6A	5.6	140	2.6	2.8
APS0420M6R8A	6.8	173	2.42	2.52
APS0420M100A	10	279	1.61	2.22
APS0420M220A	22	363	1.2	1.4
APS0515MR47A	0.47	12.6	10	15
APS0515MR68A	0.68	15.5	8	10.5
APS0515M1R0A	1	23	6.5	9
APS0515M2R2A	2.2	52	4	6
APS0515M100A	10	170	2	3
APS0518MR47A	0.47	8.9	10.6	15.65
APS0518MR56A	0.56	9.9	9.6	15.2
APS0518M1R0A	1	16.8	8.08	9.1
APS0518M1R5A	1.5	25.7	7.57	9.1
APS0518M2R2A	2.2	34.7	5.05	6.56
APS0518M3R3A	3.3	57.4	4.55	5.05
APS0518M6R8A	6.8	118.9	2.82	3.43
APS0518M100A	10	153	2.52	3.03
APS0530MR10A	0.1	2.9	25.3	33.4
APS0530MR15A	0.15	3.3	17.1	26.7

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0530MR20	0.2	3.8	14.15	14.65
APS0530MR47A	0.47	8.1	11.12	12.15
APS0530MR68A	0.68	11.8	9.1	11.6
APS0530M1R0A	1	13.8	8.6	11.12
APS0530M1R2A	1.2	15.8	8.6	11.12
APS0530M1R5A	1.5	24.7	8.3	8.6
APS0530M2R2A	2.2	28.8	7.05	7.6
APS0530M3R3A	3.3	37.6	5.55	6.05
APS0530M4R7A	4.7	59	4.55	5.05
APS0530M6R8A	6.8	89	3.53	4.05
APS0530M100A	10	124	3.23	3.54
APS0530M150A	15	196	2	2.2
APS0530M220A	22	248	1.7	2.3
APS0615MR47A	0.47	8.5	16	10
APS0615MR56A	0.56	11	14	9
APS0615MR68A	0.68	12	12	8.5
APS0615MR82A	0.82	17	10	8
APS0615M1R0A	1	21	9	6
APS0615M2R2A	2.2	54	7	3.8
APS0615M3R3A	3.3	63	5.5	3.5
APS0615M4R7A	4.7	85	5	3.2
APS0615M6R8A	6.8	135	4	2.5
APS0615M100A	10	175	3	2
APS0618MR47A	0.47	8.3	11.6	18.2
APS0618MR68A	0.68	11.9	9.6	17.2
APS0618M1R0A	1	15.5	8.6	14.15
APS0618M1R5A	1.5	25.7	8.08	12.12
APS0618M2R2A	2.2	34.6	7.05	8.1
APS0618M3R3A	3.3	49	4.55	6.55
APS0618M4R7A	4.7	61	4.05	5.05
APS0618M6R8A	6.8	108	3.03	4.55
APS0624MR22A	0.22	2.9	21.22	34.35
APS0624MR33A	0.33	4	18.18	24.75
APS0624MR47A	0.47	5	15.15	22.22

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0624MR56A	0.56	6.4	13.15	17.2
APS0624MR68A	0.68	6.9	12.15	16.15
APS0624M1R0A	1	13.3	9.1	16.15
APS0624M1R5A	1.5	20	9.1	15.15
APS0624M2R2A	2.2	27.8	7.05	14.15
APS0624M3R3A	3.3	38.5	5.55	10.1
APS0624M4R7A	4.7	59.5	5.05	7.55
APS0624M6R8A	6.8	70	4.05	6.06
APS0624M100A	10	100	3.13	4.05
APS0624M150A	15	158	2.52	3.33
APS0624M220A	22	227	2.02	2.52
APS0630MR10A	0.1	1.7	35	43
APS0630MR12A	0.12	0.95	36	50
APS0630MR15A	0.15	2.3	26	41
APS0630MR22A	0.22	3	24.25	34.35
APS0630MR24A	0.24	3	23.23	26.26
APS0630MR33A	0.33	3.5	21.2	25.25
APS0630MR47A	0.47	4.1	18.2	20.2
APS0630MR56A	0.56	4.3	16.65	18.2
APS0630MR68A	0.68	5.3	16.16	17.15
APS0630MR82A	0.82	5.9	14.14	16.15
APS0630M1R0A	1	7.3	12.12	15.15
APS0630M1R5A	1.5	12	12.12	14.15
APS0630M2R2A	2.2	14.8	9.6	10.1
APS0630M3R3A	3.3	21.8	8.55	9.55
APS0630M4R7A	4.7	32.5	6.06	9
APS0630M5R6A	5.6	45	5	7
APS0630M6R8A	6.8	47.5	5.05	6.05
APS0630M8R2A	8.2	59.5	5.05	6.05
APS0630M100A	10	66.3	4.55	5.55
APS0630M150A	15	113	3.03	4.55
APS0630M220A	22	170	2.5	3.03
APS0630M330A	33	270	2.02	2.52
APS0630M470A	47	385	1.5	2

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0650MR22A	0.22	2.5	30.03	35.35
APS0650MR47A	0.47	4.8	20.02	21.21
APS0650MR56A	0.56	5.4	18.18	18.18
APS0650MR68A	0.68	5.9	16.16	16.16
APS0650MR82A	0.82	7.3	14.15	15.15
APS0650M1R0A	1	6.4	14.15	18.18
APS0650M1R5A	1.5	7.4	12.12	15.65
APS0650M2R2A	2.2	12.3	10.1	14.14
APS0650M3R3A	3.3	21.7	8.58	12.12
APS0650M4R7A	4.7	24.7	7.07	10.1
APS0650M6R8A	6.8	41	5.5	7.07
APS0650M8R2A	8.2	48	5.05	6.7
APS0650M100A	10	54.3	4.55	6.55
APS0650M150A	15	85	3.1	4.5
APS0650M220A	22	138	2.52	4.04
APS0650M330A	33	178	2.32	3.53
APS0650M470A	47	227	2.02	2.62
APS0650M680A	68	438	1.2	1.7
APS0650M101A	100	680	0.7	1
APS0754M330D	33	127.6	3.2	4.9
APS0754M470D	47	171.6	2.4	4.1
APS0754M560D	56	209.3	2.2	3.3
APS0754M680D	68	255	2	2.8
APS0754M101D	100	348	1.8	2.4
APS0840MR22A	0.22	1.8	36	60
APS0840MR33A	0.33	2.4	30	45
APS0840MR47A	0.47	2.8	28	42
APS0840MR56A	0.56	3.2	24	26
APS0840MR68A	0.68	3.8	23	24
APS0840MR82	0.82	4.4	21	21
APS0840M1R0A	1	4.62	19	19
APS0840M1R5A	1.5	7.6	17	17
APS0840M1R8A	1.8	11	15	15
APS0840M2R2A	2.2	11.4	14	14

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS0840M3R3A	3.3	15	12	12.5
APS0840M4R7A	4.7	26.5	9.5	11.5
APS0840M5R6A	5.6	30	9	11
APS0840M6R8A	6.8	36.8	8	9
APS0840M8R2A	8.2	46	7	8.7
APS0840M100A	10	59	6.5	8
APS0840M150A	15	71	5.4	5.5
APS0840M220A	22	113	4.8	5
APS0840M330A	33	156	3.5	3.5
APS0840M470A	47	225	2.9	3.1
APS1020M4R7A	4.7	50	5	8
APS1020M100A	10	70	4	5
APS1030MR22A	0.22	1.2	33	50
APS1030MR33A	0.33	1.6	23	32
APS1030MR36A	0.36	1.6	23	28
APS1030MR47A	0.47	2.5	22	26
APS1030MR82A	0.82	3.7	18	23
APS1030M1R0A	1	6	15	21
APS1030M2R2A	2.2	9	11	14
APS1030M3R3A	3.3	16	9	12
APS1030M4R7A	4.7	24	7	10
APS1030M8R2A	8.2	45	5	7
APS1030M100A	10	50	4	7
APS1030M330A	33	160	2.5	4
APS1040MR15A	0.15	0.6	45.45	75.75
APS1040MR22A	0.22	1	35.35	60.6
APS1040MR30A	0.3	1	35.35	50.5
APS1040MR36A	0.36	1.2	30.3	50.5
APS1040MR47A	0.47	1.6	30.3	40.4
APS1040MR56A	0.56	1.7	25.25	33.33
APS1040MR68A	0.68	2.3	23.23	30.3
APS1040MR80A	0.8	2.6	23.23	29.3
APS1040M1R0A	1	3.2	19.2	28.28
APS1040M1R5A	1.5	4.1	16.15	26.25

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS1040M2R2A	2.2	6.9	12.12	18.18
APS1040M3R3A	3.3	11.6	11.1	16.15
APS1040M4R7A	4.7	19.9	9.1	15.15
APS1040M5R6A	5.6	22	8.5	12
APS1040M6R8A	6.8	24.7	8.58	12.12
APS1040M8R2A	8.2	26.5	8.08	9.1
APS1040M100A	10	29.7	7.87	8.6
APS1040M150A	15	44.5	6.55	7.07
APS1040M220A	22	65.3	5.05	5.55
APS1040M330A	33	91	4.44	5.05
APS1040M470A	47	143	3.33	3.53
APS1040M680A	68	193	2.52	3.03
APS1040M101A	100	340	2.2	2.3
APS1050MR22A	0.22	0.8	37	65
APS1050M1R0A	1	2.8	23.5	30
APS1050M2R2A	2.2	6	14	19
APS1050M3R3A	3.3	9.8	14	16
APS1050M4R7A	4.7	14	11	15
APS1050M5R6A	5.6	17	9.7	14
APS1050M6R8A	6.8	18.5	9.2	14
APS1050M100A	10	28	8.2	10
APS1050M150A	15	42	6.5	7.5
APS1050M220A	22	50	5.5	6
APS1050M330A	33	86	4.8	5.2
APS1050M470A	47	127	3.7	4.5
APS1050M680A	68	180	2.7	3.5
APS1050M101A	100	290	2.1	2.8
APS1054MR68D	0.68	2.22	32	46
APS1054M1R0D	1	2.76	30	37
APS1054M1R5D	1.5	4.2	24.8	26.8
APS1054M2R2D	2.2	4.9	23	25
APS1054M3R3D	3.3	7.4	18.7	19
APS1054M6R8D	6.8	14	12	13.3
APS1054M100D	10	24.2	8.7	12.7

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS1054M150D	15	31.3	7.6	9.2
APS1054M220D	22	50	6	8.8
APS1054M330D	33	75.3	4.8	7.6
APS1054M470D	47	103	4.1	4.9
APS1054M680D	68	152	3.3	4.2
APS1054M101D	100	234	2.8	3.5
APS1350MR22A	0.22	0.7	50.5	75.75
APS1350MR36A	0.36	0.8	42.4	50.5
APS1350MR47A	0.47	1.1	38.38	48.5
APS1350MR68A	0.68	1.5	33.33	46.46
APS1350MR82	0.82	1.6	30.3	39.39
APS1350M1R0A	1	2.2	26.26	35.35
APS1350M1R5A	1.5	3.1	23.23	33.33
APS1350M2R2A	2.2	4.9	15.15	24.25
APS1350M3R3A	3.3	6.9	14.15	22.23
APS1350M4R7A	4.7	8.9	13.13	21.2
APS1350M6R8A	6.8	17.9	12.12	16.16
APS1350M330A	33	83	3.53	6.05
APS1350M470A	47	128	3.03	5.05
APS1360M1R0A	1	2.1	28	31
APS1360M1R5A	1.5	2.7	16	28
APS1360M2R2A	2.2	2.7	16	22
APS1360M3R3A	3.3	6.8	17.5	25
APS1360M4R7A	4.7	9.9	15.15	24.24
APS1360M5R6A	5.6	10.9	13.13	22.73
APS1360M6R8A	6.8	13.3	12.12	19.19
APS1360M7R8A	7.8	14.4	11.61	18.18
APS1360M8R2A	8.2	15.8	11.11	13.63
APS1360M100A	10	20.4	10.1	12.62
APS1360M120A	12	22.7	9.1	10.1
APS1360M150A	15	28.7	8.58	9.1
APS1360M180A	18	34.6	7.57	8.08
APS1360M220A	22	39	7.07	7.57
APS1360M270A	27	55.4	6.06	6.56

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS1360M330A	33	74.3	5.55	6.06
APS1360M470A	47	89.1	5.05	5.55
APS1360M680A	68	138.6	4.04	4.54
APS1360M101A	100	198	3.03	3.53
APS1360M121A	120	232.6	2.02	3.23
APS1360M151A	150	346.5	1.52	2.72
APS1770M1R0A	1	1.5	42.5	50
APS1770M1R5A	1.5	2.2	33	40
APS1770M2R2A	2.2	2.5	29.3	34.34
APS1770M3R3A	3.3	2.9	24.7	27.27
APS1770M4R7A	4.7	4.67	16.2	24.24
APS1770M6R8A	6.8	7.5	14.1	22.22
APS1770M8R2A	8.2	8.6	12.6	20.2
APS1770M100A	10	9.9	11	18.2
APS1770M150A	15	17.3	10.1	14.65
APS1770M200A	20	21.6	9.6	12.12
APS1770M220A	22	22.7	8.1	11.11
APS1770M330A	33	36.6	7	10.1
APS1770M470A	47	46.5	6	7.57
APS1770M680A	68	84.2	5.6	6.56
APS1770M101A	100	128.7	4.1	4.55
APS2213M1R0A	1	0.95	70	60
APS2213M1R5A	1.5	1.15	62	52
APS2213M2R2A	2.2	1.25	58	48
APS2213M3R3A	3.3	1.75	49	41
APS2213M4R7A	4.7	2.2	47	38
APS2213M6R8A	6.8	3.1	40	36
APS2213M100A	10	4.15	33	28
APS2213M150A	15	6.12	26	23

APS Series

Part Number	Inductance (μH) @100KHz/1V	DC Resistance (mΩ) Max.	Heat Rating Current Irms (A)Typ.	Saturation Current Isat (A)Typ.
APS2213M220A	22	11	22	15
APS2213M330A	33	15.4	19	12
APS2213M470A	47	20.8	17	12
APS2213M680A	68	29.5	14	12
APS2213M820A	82	34.2	12	9
APS2213M101A	100	40	11	9