

APS-F Series

Features

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

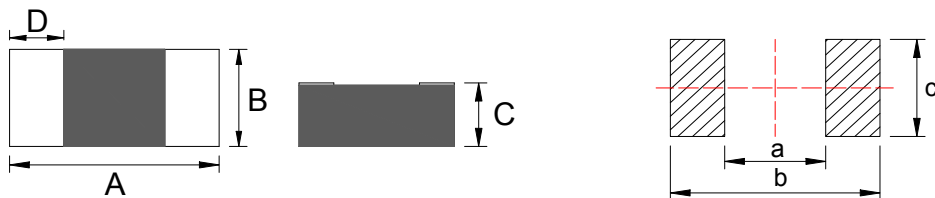
Applications

- DC/DC converter in portable device.
- Tablet pc , CPU V core, desktop etc.
- Switchs and servers.

Test Equipment and Conditions

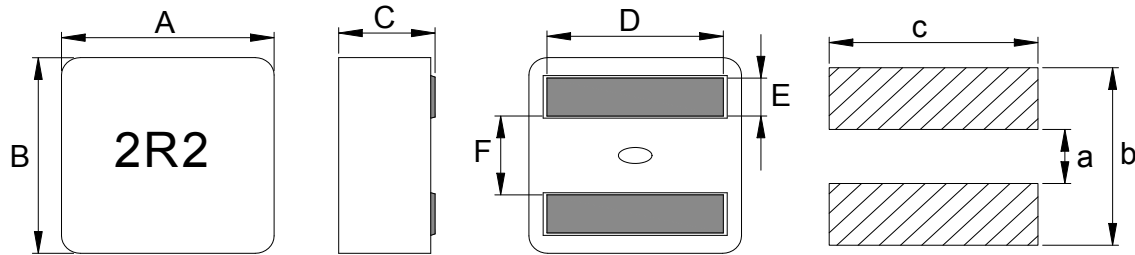
- All test data is referenced to 25°C ambient.
- Operating temperature range -40°C to +125°C.(Including self - temperature rise).
- DC current(Irms)that will cause an approximate ΔT of 40°C.
- DC current(Isat)that will cause L0 to drop approximately 40%.
- For APS25 size project ,absolute maximum voltage 20VDC;
- Above APS04 size project, absolute maximum voltage 55VDC.

External Dimensions (Unit:mm)



TYPE	A	B	C Max	D typ	E typ	F typ	a typ	b typ	c typ	Q'TY/Reel
APS02F10	2.0±0.2	1.6±0.2	1	0.6	/	/	0.9	2.3	1.9	3000
APS25F10	2.5±0.2	2.0±0.2	1.05	0.7	/	/	1.2	2.8	2.3	3000
APS25F12	2.5±0.2	2.0±0.2	1.25	0.7	/	/	1.2	2.8	2.3	3000
APS32F12	3.2±0.2	2.5±0.2	1.25	0.7	/	/	1.8	3.7	2.8	2000

External Dimensions (Unit:mm)



TYPE	A	B	C Max	D typ	E typ	F typ	a typ	b typ	c typ	Q'TY/Reel
APS04F20	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
APS04F30	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
APS05F20	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
APS05F30	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
APS05F50	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
APS06F30	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
APS06F50	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
APS06F60	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
APS07F20	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
APS07F30	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
APS07F70	7.8±0.25	7.6±0.25	7	6.5	1.75±0.3	3.15±0.3	2.8	7.8	7.2	700
APS08F80	8.9±0.3	8.5±0.3	8	7	1.8±0.2	3.5±0.3	2.7	8	7.8	450
APS10F30	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
APS10F60	11.9±0.3	11.0±0.3	6	9	2.4±0.2	4.4±0.3	3.7	10.5	11	500
APS10F10	11.9±0.3	11.0±0.3	10	9	2.4±0.2	4.2±0.3	3.7	10.5	11	300
APS15F80	16.5±0.3	15.5±0.3	8	13.2	3.2±0.3	7.4±0.5	6	15	15	200
APS15F10	16.5±0.3	15.5±0.3	10	13.2	3.2±0.3	7.4±0.5	6	15	15	150
APS15F13	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

APS	04	F	20	LC	M	100
Series Name	Dimensions: L*W	Materials	Dimensions: H	Internal control	Tolerance	Inductance

APS-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.
APS02F10LCMR10	0.1	1MHz/1V	12	6.5	9
APS02F10LCMR15	0.15	1MHz/1V	14	5.4	6.4
APS02F10LCMR24	0.24	1MHz/1V	17	5	6
APS02F10LCMR33	0.33	1MHz/1V	23	4.2	5.1
APS02F10LCMR47	0.47	1MHz/1V	25	4	4.8
APS02F10LCMR56	0.56	1MHz/1V	35	3.6	3.8
APS02F10LCMR68	0.68	1MHz/1V	40	3.4	3.6
APS02F10LCM1R0	1	1MHz/1V	48	2.7	3.3
APS02F10LCM1R5	1.5	1MHz/1V	100	2.3	2.8
APS02F10LCM2R2	2.2	1MHz/1V	130	1.7	2.5
APS02F10LCM3R3	3.3	1MHz/1V	250	1.2	1.5
APS25F10LCMR10	0.1	1MHz/1V	12	6.5	8.5
APS25F10LCMR22	0.22	1MHz/1V	18	5.5	7
APS25F10LCMR33	0.33	1MHz/1V	20	4.8	6.6
APS25F10LCMR47	0.47	1MHz/1V	25	4.4	6
APS25F10LCMR68	0.68	1MHz/1V	40	3.5	5
APS25F10LCM1R0	1	1MHz/1V	52	3.1	4.3
APS25F10LCM1R5	1.5	1MHz/1V	85	2.5	3.5
APS25F10LCM2R2	2.2	1MHz/1V	110	2.1	3
APS25F10LCM3R3	3.3	1MHz/1V	170	1.6	2.3
APS25F10LCM4R7	4.7	1MHz/1V	262	1.3	1.8
APS25F12LCMR10	0.1	1MHz/1V	11	7	11
APS25F12LCMR15	0.15	1MHz/1V	12.8	5.8	8.7
APS25F12LCMR22	0.22	1MHz/1V	14	5.7	8
APS25F12LCMR24	0.24	1MHz/1V	15	8	9.3
APS25F12LCMR33	0.33	1MHz/1V	18	5.1	7.5
APS25F12LCMR47	0.47	1MHz/1V	20	4.9	6.7
APS25F12LCMR68	0.68	1MHz/1V	30	3.5	6
APS25F12LCM1R0	1	1MHz/1V	42	3.4	4.5
APS25F12LCM1R5	1.5	1MHz/1V	60	2.7	3.8
APS25F12LCM2R2	2.2	1MHz/1V	84	2.2	3.5
APS25F12LCM3R3	3.3	1MHz/1V	130	1.8	2.9
APS25F12LCM4R7	4.7	1MHz/1V	200	1.4	2.1
APS25F12LCM100	10	1MHz/1V	400	1.2	1.6

APS-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.
APS32F12LCMR15	0.15	1MHz/1V	12	6.8	11.6
APS32F12LCMR22	0.22	1MHz/1V	15	6	10
APS32F12LCMR33	0.33	1MHz/1V	16	5.8	9.5
APS32F12LCMR47	0.47	1MHz/1V	22	5.1	8.2
APS32F12LCMR68	0.68	1MHz/1V	26	4.4	6.1
APS32F12LCM1R0	1	1MHz/1V	32	3.8	4.8
APS32F12LCM1R5	1.5	1MHz/1V	48	3.1	3.9
APS32F12LCM2R2	2.2	1MHz/1V	68	2.6	3.4
APS32F12LCM3R3	3.3	1MHz/1V	108	2	2.6
APS32F12LCM4R7	4.7	1MHz/1V	157	1.6	2.3
APS32F12LCM6R8	6.8	1MHz/1V	220	1.3	2
APS04F20LCMR10	0.1	100KHz/0.1V	2.42	18	33
APS04F20LCMR22	0.22	100KHz/0.1V	4.6	16.8	18.8
APS04F20LCMR36	0.36	100KHz/0.1V	6.3	14.5	15
APS04F20LCMR40	0.4	100KHz/0.1V	7.73	14	13.5
APS04F20LCMR47	0.47	100KHz/0.1V	8.58	12.5	13
APS04F20LCMR56	0.56	100KHz/0.1V	9.3	12	12.6
APS04F20LCMR60	0.6	100KHz/0.1V	9.52	11.7	12.3
APS04F20LCMR72	0.72	100KHz/0.1V	11.6	10.5	10.6
APS04F20LCM1R0	1	100KHz/0.1V	14.6	9.6	8.8
APS04F20LCM1R2	1.2	100KHz/0.1V	17.9	9	7.8
APS04F20LCM1R5	1.5	100KHz/0.1V	23.5	7.6	7.4
APS04F20LCM1R8	1.8	100KHz/0.1V	28	7	7
APS04F20LCM2R2	2.2	100KHz/0.1V	38.7	5.6	6
APS04F30LCMR75	0.75	100KHz/0.1V	10.8	10	9
APS04F30LCM1R0	1	100KHz/0.1V	12.76	10	10
APS04F30LCM2R2	2.2	100KHz/0.1V	20.8	7.2	7
APS04F30LCM3R3	3.3	100KHz/0.1V	28.6	6.6	5.5
APS04F30LCM4R7	4.7	100KHz/0.1V	44.1	5.1	4.5
APS04F30LCM6R8	6.8	100KHz/0.1V	74.1	3.9	3.6
APS05F20LCMR15	0.15	100KHz/0.1V	4.6	18.8	27
APS05F20LCMR16	0.16	100KHz/0.1V	4.6	18.8	27
APS05F20LCMR33	0.33	100KHz/0.1V	7	14.4	24
APS05F20LCMR47	0.47	100KHz/0.1V	8.1	14.1	20

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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.
APS05F20LCMR56	0.56	100KHz/0.1V	9.5	13.9	16
APS05F20LCMR68	0.68	100KHz/0.1V	10.2	13.4	14
APS05F20LCMR80	0.8	100KHz/0.1V	11.8	13	13.5
APS05F20LCMR82	0.82	100KHz/0.1V	12.7	12	13
APS05F20LCM1R0	1	100KHz/0.1V	13.8	10.5	12.8
APS05F20LCM1R2	1.2	100KHz/0.1V	16.3	9.4	12.2
APS05F20LCM1R5	1.5	100KHz/0.1V	18.7	8.8	11.7
APS05F30LCMR15	0.15	100KHz/0.1V	2.31	22.2	32.5
APS05F30LCMR16	0.16	100KHz/0.1V	2.33	22.2	32
APS05F30LCMR33	0.33	100KHz/0.1V	3.52	19.2	26
APS05F30LCMR47	0.47	100KHz/0.1V	4.13	18.4	24
APS05F30LCMR56	0.56	100KHz/0.1V	4.52	17.7	20.2
APS05F30LCMR60	0.6	100KHz/0.1V	4.52	17.7	20
APS05F30LCMR80	0.8	100KHz/0.1V	5.65	13.1	18
APS05F30LCMR82	0.82	100KHz/0.1V	5.78	12.9	17.6
APS05F30LCM1R0	1	100KHz/0.1V	7.6	12.2	14.3
APS05F30LCM1R2	1.2	100KHz/0.1V	9.7	11	13.5
APS05F30LCM1R5	1.5	100KHz/0.1V	11.2	10.5	12.5
APS05F30LCM1R8	1.8	100KHz/0.1V	12.7	10.1	11.3
APS05F30LCM2R2	2.2	100KHz/0.1V	14.5	9.7	9
APS05F30LCM3R3	3.3	100KHz/0.1V	23.1	8.1	8.7
APS05F30LCM4R7	4.7	100KHz/0.1V	36.3	5.9	7
APS05F50LCM5R6	5.6	100KHz/0.1V	24.2	7.2	7.2
APS05F50LCM6R8	6.8	100KHz/0.1V	28.6	6.4	6.6
APS05F50LCM8R2	8.2	100KHz/0.1V	32.5	6.1	6.1
APS05F50LCM100	10	100KHz/0.1V	43	5	5.4
APS06F30LCMR18	0.18	100KHz/0.1V	1.75	32	39
APS06F30LCMR33	0.33	100KHz/0.1V	2.5	25	30
APS06F30LCMR56	0.56	100KHz/0.1V	3.31	22	29
APS06F30LCMR68	0.68	100KHz/0.1V	5.17	20	25
APS06F30LCM1R0	1	100KHz/0.1V	6.05	18	23
APS06F30LCM1R2	1.2	100KHz/0.1V	7.4	16	22
APS06F30LCM1R5	1.5	100KHz/0.1V	9.13	15	20
APS06F30LCM1R8	1.8	100KHz/0.1V	10.2	14	18.2

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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.
APS06F30LCM2R2	2.2	100KHz/0.1V	12.2	10	15.9
APS06F30LCM3R3	3.3	100KHz/0.1V	20.8	8	12.2
APS06F30LCM4R5	4.5	100KHz/0.1V	25.3	7	10
APS06F30LCM4R7	4.7	100KHz/0.1V	26	6	9
APS06F50LCMR82	0.82	100KHz/0.1V	4.18	21	20
APS06F50LCM1R0	1	100KHz/0.1V	4.52	20	18
APS06F50LCM1R2	1.2	100KHz/0.1V	5.83	18	16
APS06F50LCM1R5	1.5	100KHz/0.1V	6.3	17	14.5
APS06F50LCM1R8	1.8	100KHz/0.1V	7.1	16	13.5
APS06F50LCM2R2	2.2	100KHz/0.1V	8.5	13	12
APS06F50LCM3R3	3.3	100KHz/0.1V	12.5	11	10
APS06F50LCM4R3	4.3	100KHz/0.1V	16.2	9	8.5
APS06F50LCM4R7	4.7	100KHz/0.1V	18.4	8.5	8
APS06F50LCM5R6	5.6	100KHz/0.1V	22	7	8.3
APS06F50LCM6R8	6.8	100KHz/0.1V	25.4	6.6	7
APS06F50LCM8R2	8.2	100KHz/0.1V	31.5	6.2	6.8
APS06F60LCM1R0	1	100KHz/0.1V	4.4	21	24
APS06F60LCM1R5	1.5	100KHz/0.1V	6.1	17.5	20
APS06F60LCM2R2	2.2	100KHz/0.1V	8.1	14	16.5
APS06F60LCM3R3	3.3	100KHz/0.1V	12.3	12	13
APS06F60LCM4R7	4.7	100KHz/0.1V	14.4	11	10.5
APS06F60LCM5R6	5.6	100KHz/0.1V	15.9	10	9.9
APS06F60LCM6R8	6.8	100KHz/0.1V	20.8	9	9.2
APS06F60LCM8R2	8.2	100KHz/0.1V	26.4	8	8.4
APS06F60LCM100	10	100KHz/0.1V	29.82	7	7.6
APS06F60LCM150	15	100KHz/0.1V	43.75	6	5.8
APS06F60LCM220	22	100KHz/0.1V	60.63	5	5.6
APS07F20LCMR27	0.27	100KHz/0.1V	3.5	21	35
APS07F20LCMR31	0.31	100KHz/0.1V	4.8	20	34
APS07F20LCMR33	0.33	100KHz/0.1V	4.8	19	34
APS07F20LCMR47	0.47	100KHz/0.1V	6.2	17	28
APS07F20LCMR68	0.68	100KHz/0.1V	9.2	13	25
APS07F20LCM1R0	1	100KHz/0.1V	10.8	11	23
APS07F30LCM1R0	1	100KHz/0.1V	5	21.8	28

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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.
APS07F30LCM1R5	1.5	100KHz/0.1V	8.25	15.3	23.5
APS07F30LCM2R2	2.2	100KHz/0.1V	13.7	13	17
APS07F30LCM2R7	2.7	100KHz/0.1V	15.4	11.4	13.5
APS07F30LCM3R3	3.3	100KHz/0.1V	18	10	13
APS07F30LCM4R7	4.7	100KHz/0.1V	26.7	9	12.2
APS07F30LCM5R6	5.6	100KHz/0.1V	33.2	7.3	11.5
APS07F30LCM6R8	6.8	100KHz/0.1V	42.5	6.8	11
APS07F30LCM8R2	8.2	100KHz/0.1V	48.73	5.9	9
APS07F70LCM3R3	3.3	100KHz/0.1V	9.42	15.1	19.4
APS07F70LCM4R7	4.7	100KHz/0.1V	14.26	13.6	15.2
APS07F70LCM6R8	6.8	100KHz/0.1V	19.6	9.2	12.8
APS08F80LCM1R8	1.8	100KHz/0.1V	4	24	28
APS08F80LCM2R2	2.2	100KHz/0.1V	4.3	21.5	25
APS08F80LCM3R3	3.3	100KHz/0.1V	7.3	18	23
APS08F80LCM4R7	4.7	100KHz/0.1V	9.8	14.6	19
APS08F80LCM6R8	6.8	100KHz/0.1V	14.3	11.3	14.5
APS08F80LCM100	10	100KHz/0.1V	22.9	8.7	11
APS10F30LCMR28	0.28	100KHz/0.1V	1.6	35	65
APS10F30LCMR56	0.56	100KHz/0.1V	2.75	32	44
APS10F30LCMR82	0.82	100KHz/0.1V	4.1	25	38
APS10F30LCMR90	0.9	100KHz/0.1V	4.2	24	36
APS10F30LCM1R0	1	100KHz/0.1V	4.95	23	35
APS10F30LCM1R5	1.5	100KHz/0.1V	6.6	18	30
APS10F60LCMR68	0.68	100KHz/0.1V	1.5	34	55
APS10F60LCM1R0	1	100KHz/0.1V	2.32	28.5	48
APS10F60LCM1R2	1.2	100KHz/0.1V	2.64	26.5	45
APS10F60LCM1R5	1.5	100KHz/0.1V	3.3	24.5	40
APS10F60LCM2R2	2.2	100KHz/0.1V	4.84	20	35
APS10F60LCM3R3	3.3	100KHz/0.1V	7.7	16.8	28
APS10F60LCM4R7	4.7	100KHz/0.1V	10.72	14	25
APS10F10LCM1R0	1	100KHz/0.1V	1.2	40	50
APS10F10LCM2R2	2.2	100KHz/0.1V	2.8	32	34
APS10F10LCM3R3	3.3	100KHz/0.1V	4.1	25	27.4
APS10F10LCM4R7	4.7	100KHz/0.1V	5.7	24	25.4

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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.
APS10F10LCM5R6	5.6	100KHz/0.1V	7.2	21.2	23.6
APS10F10LCM6R8	6.8	100KHz/0.1V	8.9	18.5	21.8
APS10F10LCM8R2	8.2	100KHz/0.1V	12.4	17.1	18.3
APS10F10LCM100	10	100KHz/0.1V	13.8	15.5	17.5
APS10F10LCM150	15	100KHz/0.1V	19.3	13.8	15.5
APS15F80LCM2R0	2	100KHz/0.1V	2.2	40	52
APS15F80LCM2R2	2.2	100KHz/0.1V	2.5	37	49
APS15F80LCM3R0	3	100KHz/0.1V	3	34.5	41
APS15F80LCM4R2	4.2	100KHz/0.1V	4.7	27	33
APS15F80LCM4R7	4.7	100KHz/0.1V	5.2	26.5	32
APS15F80LCM5R3	5.3	100KHz/0.1V	5.3	26	31
APS15F80LCM6R2	6.2	100KHz/0.1V	6.5	23	31
APS15F80LCM7R2	7.2	100KHz/0.1V	7.2	21	29
APS15F80LCM8R2	8.2	100KHz/0.1V	7.9	19	25
APS15F10LCM4R7	4.7	100KHz/0.1V	3.8	29	39
APS15F10LCM5R6	5.6	100KHz/0.1V	4.2	28	37
APS15F10LCM6R8	6.8	100KHz/0.1V	4.6	26	36
APS15F10LCM8R2	8.2	100KHz/0.1V	7.2	24	30
APS15F10LCM100	10	100KHz/0.1V	8.6	22	26.5
APS15F10LCM150	15	100KHz/0.1V	11.5	18	23
APS15F10LCM220	22	100KHz/0.1V	15.8	14	18.7
APS15F10LCM330	33	100KHz/0.1V	20	12	16.7
APS15F13LCM4R7	4.7	100KHz/0.1V	3.3	31	44
APS15F13LCM5R6	5.6	100KHz/0.1V	3.9	29	40
APS15F13LCM6R8	6.8	100KHz/0.1V	4.2	27	37
APS15F13LCM8R2	8.2	100KHz/0.1V	5.74	26	33
APS15F13LCM100	10	100KHz/0.1V	7	25	30
APS15F13LCM150	15	100KHz/0.1V	7.5	22	25.5
APS15F13LCM220	22	100KHz/0.1V	13.86	17	22
APS15F13LCM330	33	100KHz/0.1V	22.2	14	19