

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

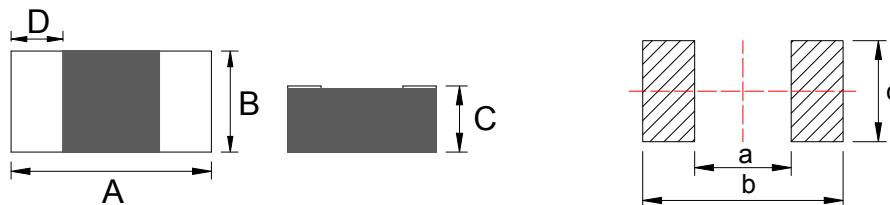
Applications

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

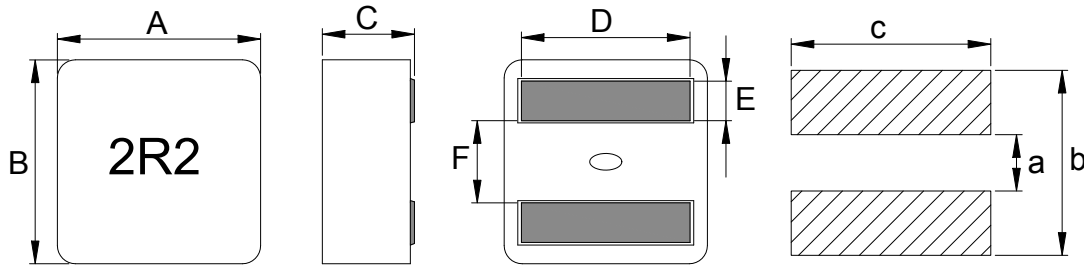
Test Equipment and Conditions

- 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 Lo to drop approximately 40%.
- For APS25 size project ,absolute maximum voltage 20VDC;
- Above APS04 size project, absolute maximum voltage 55VDC.

External Dimensions (Unit:m/m)



Type	A	B	C Max.	D Typ.	E	F	a Typ.	b Typ.	c Typ.	Q'TY/Reel
APS02F10	2.0±0.2	1.6±0.2	1.0	0.60	/	/	0.9	2.3	1.9	3000
APS25F10	2.5±0.2	2.0±0.2	1.05	0.70	/	/	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



Type	A	B	C Max.	D Typ.	E	F	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	2.0	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	2.0	4.5	4.7	2000
APS05F50	5.5±0.2	5.3±0.2	5.0	4.3	1.1±0.3	2.3±0.3	2.0	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	5.0	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	6.0	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	2.0	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	7.0	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	8.0	7.0	1.8±0.2	3.5±0.3	2.7	8.0	7.8	450
APS10F30	11.9±0.3	11.0±0.3	3.1	9.0	2.4±0.2	4.4±0.3	3.7	10.5	11.0	1000
APS10F60	11.9±0.3	11.0±0.3	6.0	9.0	2.4±0.2	4.4±0.3	3.7	10.5	11.0	500
APS10F10	11.9±0.3	11.0±0.3	10.0	9.0	2.4±0.2	4.2±0.3	3.7	10.5	11.0	300
APS15F80	16.5±0.3	15.5±0.3	8.0	13.2	3.2±0.3	7.4±0.5	6.0	15.0	15.0	200
APS15F10	16.5±0.3	15.5±0.3	10.0	13.2	3.2±0.3	7.4±0.5	6.0	15.0	15.0	150
APS15F13	16.5±0.3	15.5±0.3	13.0	13.2	3.2±0.3	7.0±0.5	6.0	15.0	15.0	100

Part Number Code

APS 02 F 10 M R10
 A B C D E F

A: Series Name Molding Power Inductors
 B: Dimensions(mm) 02: 2.0 x 1.6
 C: Materials F: Type
 D: Thickness(mm) 10: 1.0Max
 E: Tolerance M: ±20%
 F: Inductance R10=0.1uH

APS-F Series

Part Number	Inductance (μH) $\pm 20\%$ @1MHz	DC Resistance ($\text{m}\Omega$) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APS02F10MR10	0.1	9	6.5	9
APS02F10MR15	0.15	14	5.4	6.4
APS02F10MR24	0.24	17	5	6
APS02F10MR33	0.33	23	4.2	5.1
APS02F10MR47	0.47	25	4	4.8
APS02F10MR56	0.56	35	3.6	3.8
APS02F10MR68	0.68	40	3.4	3.6
APS02F10M1R0	1	48	2.7	3.3
APS02F10M1R5	1.5	80	2.3	2.8
APS02F10M2R2	2.2	120	1.7	2.5
APS02F10M3R3	3.3	250	1.2	1.5
APS25F10MR10	0.1	12	6.5	8.5
APS25F10MR22	0.22	18	5.5	7
APS25F10MR33	0.33	20	4.8	6.6
APS25F10MR47	0.47	25	4.4	6
APS25F10MR68	0.68	40	3.5	5
APS25F10M1R0	1	52	3.1	4.3
APS25F10M1R5	1.5	85	2.5	3.5
APS25F10M2R2	2.2	110	2.1	3
APS25F10M3R3	3.3	170	1.6	2.3
APS25F10M4R7	4.7	262	1.3	1.8
APS25F12MR10	0.1	11	7	11
APS25F12MR15	0.15	12.8	5.8	8.7
APS25F12MR22	0.22	14.0	5.7	8
APS25F12MR24	0.24	15	8	9.3
APS25F12MR33	0.33	18	5.1	7.5
APS25F12MR47	0.47	20	4.9	6.7
APS25F12MR68	0.68	30	3.5	6
APS25F12M1R0	1	42	3.4	4.5
APS25F12M1R5	1.5	60	2.7	3.8
APS25F12M2R2	2.2	84	2.2	3.5
APS25F12M3R3	3.3	130	1.8	2.9

APS-F Series

Part Number	Inductance (μH) $\pm 20\%$ @1MHz	DC Resistance ($\text{m}\Omega$) Max.	Heat Rating Current I_{rms} (A)Typ.	Saturation Current I_{sat} (A)Typ.
APS25F12M4R7	4.7	200	1.4	2.1
APS25F12M100	10	400	1.2	1.6
APS32F12MR15	0.15	12	6.8	11.6
APS32F12MR22	0.22	15	6	10
APS32F12MR33	0.33	16	5.8	9.5
APS32F12MR47	0.47	22	5.1	8.2
APS32F12MR68	0.68	26	4.4	6.1
APS32F12M1R0	1	32	3.8	4.8
APS32F12M1R5	1.5	48	3.1	3.9
APS32F12M2R2	2.2	68	2.6	3.4
APS32F12M3R3	3.3	108	2	2.6
APS32F12M4R7	4.7	157	1.6	2.3
APS32F12M6R8	6.8	220	1.3	2

APS-F Series

Part Number	Inductance (μ H) \pm 20% @100KHz	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APS04F20MR10	0.1	2.42	18	33
APS04F20MR22	0.22	4.6	16.8	18.8
APS04F20MR36	0.36	6.3	14.5	15
APS04F20MR40	0.4	7.73	14	13.5
APS04F20MR47	0.47	8.58	12.5	13
APS04F20MR56	0.56	9.3	12	12.6
APS04F20MR60	0.6	9.52	11.7	12.3
APS04F20MR72	0.72	11.6	10.5	10.6
APS04F20M1R0	1	14.6	9.6	8.8
APS04F20M1R2	1.2	17.9	9	7.8
APS04F20M1R5	1.5	23.5	7.6	7.4
APS04F20M1R8	1.8	28	7	7
APS04F20M2R2	2.2	38.7	5.6	6
APS04F30MR75LR	0.75	10.8	10	9
APS04F30M1R0LR	1	12.76	10	10
APS04F30M2R2LR	2.2	20.8	7.2	7
APS04F30M3R3LR	3.3	28.6	6.6	5.5
APS04F30M4R7LR	4.7	44.1	5.1	4.5
APS04F30M6R8LR	6.8	74.1	3.9	3.6
APS05F20MR15	0.15	4.6	18.8	27
APS05F20MR16	0.16	4.6	18.8	27
APS05F20MR33	0.33	7	14.4	24
APS05F20MR47	0.47	8.1	14.1	20
APS05F20MR56	0.56	9.5	13.9	16
APS05F20MR68	0.68	10.2	13.4	14
APS05F20MR80	0.8	11.8	13	13.5
APS05F20MR82	0.82	12.7	12	13
APS05F20M1R0	1	13.8	10.5	12.8
APS05F20M1R2	1.2	16.3	9.4	12.2
APS05F20M1R5	1.5	18.7	8.8	11.7
APS05F30MR15	0.15	2.31	22.2	32.5
APS05F30MR16	0.16	2.33	22.2	32

APS-F Series

Part Number	Inductance (μ H) \pm 20% @100KHz	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APS05F30MR33	0.33	3.52	19.2	26
APS05F30MR47	0.47	4.13	18.4	24
APS05F30MR56	0.56	4.52	17.7	20.2
APS05F30MR60	0.6	4.52	17.7	20
APS05F30MR80	0.8	5.65	13.1	18
APS05F30MR82	0.82	5.78	12.9	17.6
APS05F30M1R0	1	7.6	12.2	14.3
APS05F30M1R2	1.2	9.7	11	13.5
APS05F30M1R5	1.5	11.2	10.5	12.5
APS05F30M1R8	1.8	12.7	10.1	11.3
APS05F30M2R2	2.2	14.5	9.7	9
APS05F30M3R3	3.3	23.1	8.1	8.7
APS05F30M4R7	4.7	36.3	5.9	7
APS05F50M5R6LR	5.6	24.2	7.2	7.2
APS05F50M6R8LR	6.8	28.6	6.4	6.6
APS05F50M8R2LR	8.2	32.5	6.1	6.1
APS05F50M100LR	10	43	5	5.4
APS06F30MR18	0.18	1.75	32	39
APS06F30MR33	0.33	2.5	25	30
APS06F30MR56	0.56	3.31	22	29
APS06F30MR68	0.68	5.17	20	25
APS06F30M1R0	1	6.05	18	23
APS06F30M1R2	1.2	7.4	16	22
APS06F30M1R5	1.5	9.13	15	20
APS06F30M1R8	1.8	10.2	14	18.2
APS06F30M2R2	2.2	12.2	10	15.9
APS06F30M3R3	3.3	20.8	8	12.2
APS06F30M4R5	4.5	25.3	7	10
APS06F30M4R7	4.7	26	6	9
APS06F50MR82	0.82	4.18	21	20
APS06F50M1R0	1	4.52	20	18
APS06F50M1R2	1.2	5.83	18	16

APS-F Series

Part Number	Inductance (μ H) \pm 20% @100KHz	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APS06F50M1R5	1.5	6.3	17	14.5
APS06F50M1R8	1.8	7.1	16	13.5
APS06F50M2R2	2.2	8.5	13	12
APS06F50M3R3	3.3	12.5	11	10
APS06F50M4R3	4.3	16.2	9	8.5
APS06F50M4R7	4.7	18.4	8.5	8
APS06F50M5R6	5.6	22	7	8.3
APS06F50M6R8	6.8	25.4	6.6	7
APS06F50M8R2	8.2	31.5	6.2	6.8
APS06F60M1R0	1	4.4	21	24
APS06F60M1R5	1.5	6.1	17.5	20
APS06F60M2R2	2.2	8.1	14	16.5
APS06F60M3R3	3.3	12.3	12	13
APS06F60M4R7LR	4.7	14.4	11	10.5
APS06F60M5R6LR	5.6	15.9	10	9.9
APS06F60M6R8LR	6.8	20.8	9	9.2
APS06F60M8R2LR	8.2	26.4	8	8.4
APS06F60M100LR	10	29.82	7	7.6
APS06F60M150LR	15	43.75	6	5.8
APS06F60M220LR	22	60.63	5	5.6
APS07F20MR27	0.27	3.5	21	35
APS07F20MR31	0.31	4.8	20	34
APS07F20MR33	0.33	4.8	19	34
APS07F20MR47	0.47	6.2	17	28
APS07F20MR68	0.68	9.2	13	25
APS07F20M1R0	1	10.8	11	23
APS07F30M1R0	1	5	21.8	28
APS07F30M1R5	1.5	8.25	15.3	23.5
APS07F30M2R2	2.2	13.7	13	17
APS07F30M2R7	2.7	15.4	11.4	13.5
APS07F30M3R3	3.3	18	10	13
APS07F30M4R7	4.7	26.7	9	12.2

APS-F Series

Part Number	Inductance (μ H) \pm 20% @100KHz	DC Resistance (m Ω) Max.	Heat Rating Current I _{rms} (A)Typ.	Saturation Current I _{sat} (A)Typ.
APS07F30M5R6	5.6	33.2	7.3	11.5
APS07F30M6R8	6.8	42.5	6.8	11
APS07F30M8R2	8.2	48.73	5.9	9
APS07F70M3R3	3.3	9.42	15.1	19.4
APS07F70M4R7	4.7	14.26	13.6	15.2
APS07F70M6R8	6.8	19.6	9.2	12.8
APS08F80M1R8	1.8	4	24	28
APS08F80M2R2	2.2	4.3	21.5	25
APS08F80M3R3	3.3	7.3	18	23
APS08F80M4R7	4.7	9.8	14.6	19
APS08F80M6R8	6.8	14.3	11.3	14.5
APS08F80M100	10	22.9	8.7	11
APS10F30MR28	0.28	1.6	35	65
APS10F30MR56	0.56	2.75	32	44
APS10F30MR82	0.82	4.1	25	38
APS10F30MR90	0.9	4.2	24	36
APS10F30M1R0	1	4.95	23	35
APS10F30M1R5	1.5	6.6	18	30
APS10F60MR68	0.68	1.5	34	55
APS10F60M1R0	1	2.32	28.5	48
APS10F60M1R2	1.2	2.64	26.5	45
APS10F60M1R5	1.5	3.3	24.5	40
APS10F60M2R2	2.2	4.84	20	35
APS10F60M3R3	3.3	7.7	16.8	28
APS10F60M4R7	4.7	10.72	14	25
APS10F10M1R0	1	1.2	40	50
APS10F10M2R2	2.2	2.8	32	34
APS10F10M3R3	3.3	4.1	25	27.4
APS10F10M4R7	4.7	5.7	24	25.4
APS10F10M5R6	5.6	7.2	21.2	23.6
APS10F10M6R8	6.8	8.9	18.5	21.8
APS10F10M8R2	8.2	12.4	17.1	18.3

APS-F Series

Part Number	Inductance (μH) $\pm 20\%$ @100KHz	DC Resistance ($\text{m}\Omega$) Max.	Heat Rating Current I_{rms} (A)Typ.	Saturation Current I_{sat} (A)Typ.
APS10F10M100	10	13.8	15.5	17.5
APS10F10M150	15	19.3	13.8	15.5
APS15F80M2R0	2	2.2	40	52
APS15F80M2R2	2.2	2.5	37	49
APS15F80M3R0	3	3	34.5	41
APS15F80M4R2	4.2	4.7	27	33
APS15F80M4R7	4.7	5.2	26.5	32
APS15F80M5R3	5.3	5.3	26	31
APS15F80M6R2	6.2	6.5	23	31
APS15F80M7R2	7.2	7.2	21	29
APS15F80M8R2	8.2	7.9	19	25
APS15F10M4R7	4.7	3.8	29	39
APS15F10M5R6	5.6	4.2	28	37
APS15F10M6R8	6.8	4.6	26	36
APS15F10M8R2	8.2	7.2	24	30
APS15F10M100	10	8.6	22	26.5
APS15F10M150	15	11.5	18	23
APS15F10M220	22	15.8	14	18.7
APS15F10M330	33	20	12	16.7
APS15F13M4R7	4.7	3.3	31	44
APS15F13M5R6	5.6	3.9	29	40
APS15F13M6R8	6.8	4.2	27	37
APS15F13M8R2	8.2	5.74	26	33
APS15F13M100	10	7	25	30
APS15F13M150	15	7.5	22	25.5
APS15F13M220	22	13.86	17	22
APS15F13M330	33	22.2	14	19