

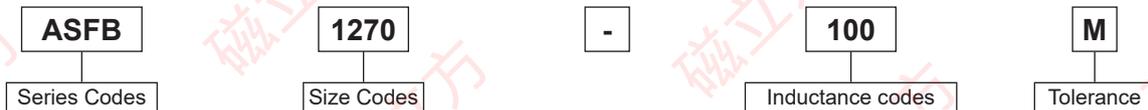
ASFB SERIES

Features:

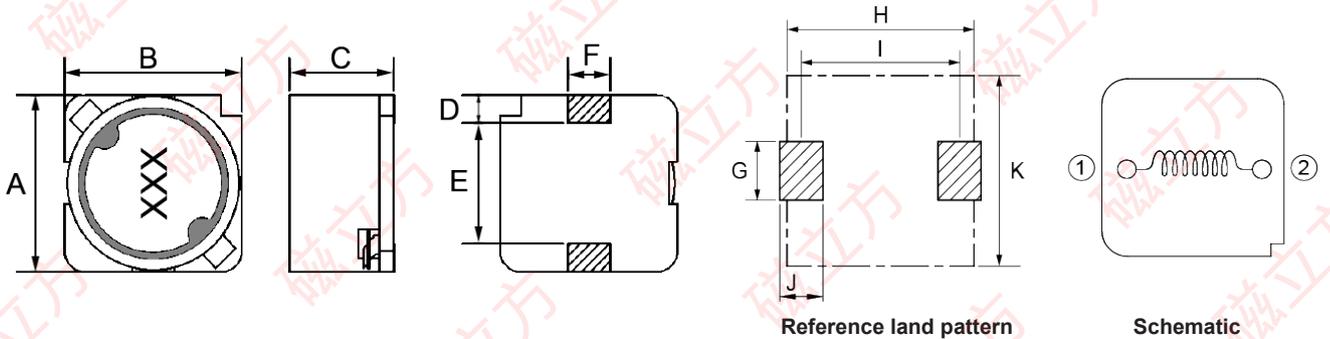
- Low DCR, high rated current.
- Magnetic shielded structure.
- Lead free product, RoHS compliant.
- Carrier tape packing, suitable for SMT process.
- Widely used in buck converter, displayer, automotive electronics, household appliance, and etc.
- Operating temperature : -40 C ~+125 C
(Including coil's temperature rise).



Explanation of part numbers:



Shape & Dimension:



Series	A	B	C	D	E	F	G	H	I	J	K
ASFB0735	7.1±0.3	7.1±0.3	3.5±0.3	1.0	5.0	2.0	2.5	7.5	6.0	2.0	7.5
ASFB0750	7.1±0.3	7.1±0.3	4.8±0.3	1.0	5.0	2.0	2.5	7.5	6.0	2.0	7.5
ASFB1045	10.1±0.3	10.0±0.3	4.6±0.4	2.0	6.0	3.0	4.0	10.4	8.0	3.0	10.4
ASFB1270	12.8±0.3	12.7±0.3	6.7±0.3	2.0	8.6	3.0	4.0	13.0	11.0	3.0	13.0

(unit: mm)

Electrical characteristics:

Test condition: at 25°C 100KHz/0.1V

Part No.	L(0A)(μ h)	DCR (m Ω)		Isat(A)	Irms(A)
		Typ	Max	Typ	Typ
ASFB0735-1R0N	1 \pm 30%	13.5	16.2	5.5	4.88
ASFB0735-1R5N	1.5 \pm 30%	16.5	19.8	4.7	4.41
ASFB0735-2R2N	2.2 \pm 30%	18.5	22.2	4	4.17
ASFB0735-3R3N	3.3 \pm 30%	24.4	29.3	3.1	3.63
ASFB0735-4R7N	4.7 \pm 30%	31	37.2	2.5	3.22
ASFB0735-6R8N	6.8 \pm 30%	41	49.2	2.1	2.8
ASFB0735-8R2N	8.2 \pm 30%	46	55.2	1.95	2.64
ASFB0735-100M	10 \pm 20%	52	62.4	1.7	2.49
ASFB0735-150M	15 \pm 20%	76	91.2	1.4	2.06
ASFB0735-220M	22 \pm 20%	115	138	1.15	1.67
ASFB0735-330M	33 \pm 20%	168	202	0.95	1.38
ASFB0735-470M	47 \pm 20%	244	293	0.78	1.15
ASFB0735-680M	68 \pm 20%	312	374	0.65	1.01
ASFB0735-820M	82 \pm 20%	402	482	0.6	0.89
ASFB0735-101M	100 \pm 20%	470	564	0.53	0.83
ASFB0735-151M	150 \pm 20%	700	840	0.45	0.68
ASFB0735-221M	220 \pm 20%	923	1108	0.36	0.59
ASFB0735-331M	330 \pm 20%	1450	1740	0.3	0.47
ASFB0735-471M	470 \pm 20%	2070	2484	0.25	0.39
ASFB0735-681M	680 \pm 20%	3030	3636	0.21	0.33
ASFB0735-821M	820 \pm 20%	3500	4200	0.19	0.3
ASFB0735-102M	1000 \pm 20%	4600	5520	0.17	0.26
ASFB0750-2R2N	2.2 \pm 30%	21.3	25.6	6.5	4
ASFB0750-3R0N	3 \pm 30%	24.2	29	6	3.74
ASFB0750-4R7N	4.7 \pm 30%	31	37.2	4.8	3.31
ASFB0750-6R8N	6.8 \pm 30%	36	43.2	4	3.07
ASFB0750-8R2N	8.2 \pm 30%	40	48	3.5	2.91
ASFB0750-100M	10 \pm 20%	56	67.2	3.2	2.46
ASFB0750-150M	15 \pm 20%	77	92.4	2.7	2.1
ASFB0750-220M	22 \pm 20%	108	130	2.3	1.77
ASFB0750-330M	33 \pm 20%	138	166	1.85	1.57
ASFB0750-470M	47 \pm 20%	177	212	1.55	1.38
ASFB0750-680M	68 \pm 20%	252	302	1.3	1.16
ASFB0750-820M	82 \pm 20%	292	350	1.15	1.08
ASFB0750-101M	100 \pm 20%	390	468	1	0.93
ASFB0750-151M	150 \pm 20%	580	696	0.85	0.76
ASFB0750-221M	220 \pm 20%	890	1068	0.7	0.62
ASFB0750-331M	330 \pm 20%	1488	1786	0.56	0.48
ASFB0750-471M	470 \pm 20%	1840	2208	0.47	0.43
ASFB0750-681M	680 \pm 20%	2620	3144	0.39	0.36
ASFB0750-821M	820 \pm 20%	3020	3624	0.35	0.33
ASFB0750-102M	1000 \pm 20%	3950	4740	0.31	0.29

Electrical characteristics:

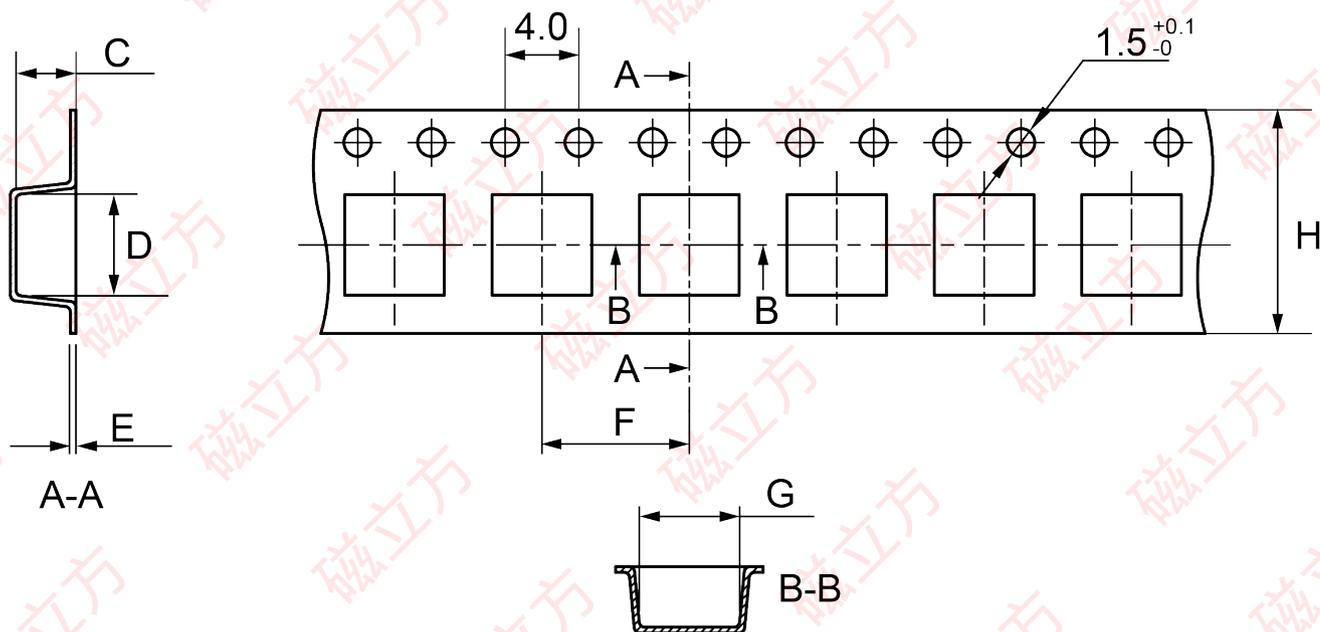
Test condition: at 25 C 100KHz/0.1V

Part No.	L(0A)(μ H)	DCR (m Ω)		Isat(A)	Irms(A)
		Typ	Max	Typ	Typ
ASFB1045-1R2N	1.2 \pm 30%	10.9	13	10	6.35
ASFB1045-2R2N	2.2 \pm 30%	12.8	15.3	8.1	5.86
ASFB1045-3R3N	3.3 \pm 30%	17	20.4	6	5.08
ASFB1045-4R7N	4.7 \pm 30%	19.4	23.2	5.3	4.76
ASFB1045-6R8N	6.8 \pm 30%	24.2	29	4.3	4.26
ASFB1045-8R2N	8.2 \pm 30%	26.5	31.8	3.9	4.07
ASFB1045-100M	10 \pm 20%	29.5	35.4	3.6	3.86
ASFB1045-150M	15 \pm 20%	45.6	54.7	2.9	3.1
ASFB1045-220M	22 \pm 20%	65	78	2.45	2.52
ASFB1045-330M	33 \pm 20%	86	103	1.9	2.26
ASFB1045-470M	47 \pm 20%	114	137	1.65	1.96
ASFB1045-680M	68 \pm 20%	169	203	1.35	1.61
ASFB1045-820M	82 \pm 20%	215	258	1.24	1.43
ASFB1045-101M	100 \pm 20%	244	293	1.1	1.34
ASFB1045-151M	150 \pm 20%	373	448	0.9	1.08
ASFB1045-221M	220 \pm 20%	535	642	0.75	0.91
ASFB1045-331M	330 \pm 20%	800	960	0.62	0.74
ASFB1045-471M	470 \pm 20%	1230	1476	0.52	0.6
ASFB1045-681M	680 \pm 20%	1530	1836	0.43	0.54
ASFB1045-821M	820 \pm 20%	2100	2520	0.39	0.46
ASFB1045-102M	1000 \pm 20%	2350	2820	0.35	0.43
ASFB1270-100M	10 \pm 20%	24.5	29.4	7.2	4.61
ASFB1270-150M	15 \pm 20%	37.5	45	5.9	3.73
ASFB1270-220M	22 \pm 20%	46	55.2	4.9	3.37
ASFB1270-330M	33 \pm 20%	70	84	4	2.73
ASFB1270-470M	47 \pm 20%	95	114	3.3	2.34
ASFB1270-680M	68 \pm 20%	121	145	2.7	2.08
ASFB1270-820M	82 \pm 20%	149	179	2.5	1.87
ASFB1270-101M	100 \pm 20%	192	230	2.25	1.65
ASFB1270-151M	150 \pm 20%	273	328	1.8	1.38
ASFB1270-221M	220 \pm 20%	338	406	1.5	1.24
ASFB1270-331M	330 \pm 20%	570	684	1.25	0.96
ASFB1270-471M	470 \pm 20%	820	984	1.05	0.8
ASFB1270-681M	680 \pm 20%	1180	1416	0.85	0.66
ASFB1270-821M	820 \pm 20%	1420	1704	0.78	0.61
ASFB1270-102M	1000 \pm 20%	1700	2040	0.7	0.55

NOTE:

- All data is tested based on 25 C ambient temperature.
- Inductance measure condition at 100kHz, 0.1V.
- Saturation current: the actual value of DC current when the inductance decrease 20% of its initial value.
- Temperature rise current: the actual value of DC current when the temperature rise is $\Delta T40$ C ($T_a=25$ C).
- Special remind: Circuit design, component placement, PCB size and thickness, cooling system and etc. all will affect the product temperature. Please verify the product temperature in the final application.

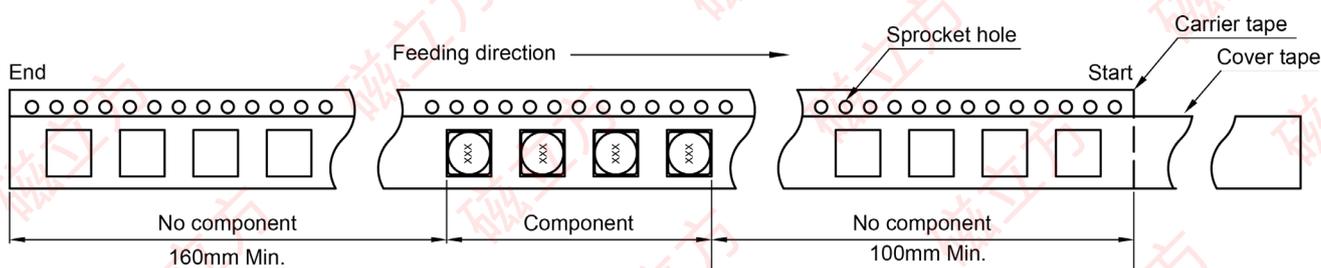
Packing Information (Carrier tape dimensions):



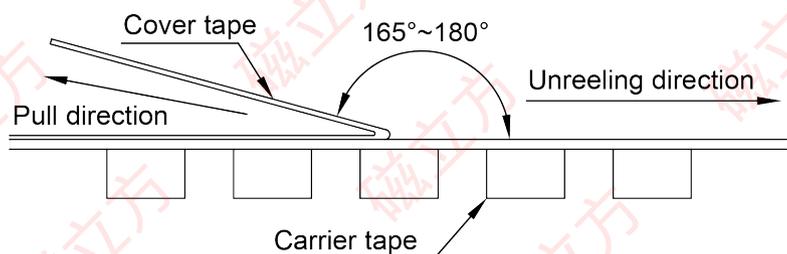
(unit: mm)

Series	C	D	E	F	G	H
ASFB0735	3.65±0.1	7.7±0.1	0.35±0.05	12.0±0.1	7.7±0.1	16.0±0.3
ASFB0750	4.8±0.1	7.8±0.1	0.35±0.05	12.0±0.1	7.8±0.1	16.0±0.3
ASFB1045	4.75±0.1	10.8±0.1	0.35±0.05	16.0±0.1	10.8±0.1	24.0±0.3
ASFB1270	8.1±0.1	12.8±0.1	0.35±0.05	16.0±0.1	12.8±0.1	24.0±0.3

Tape direction:

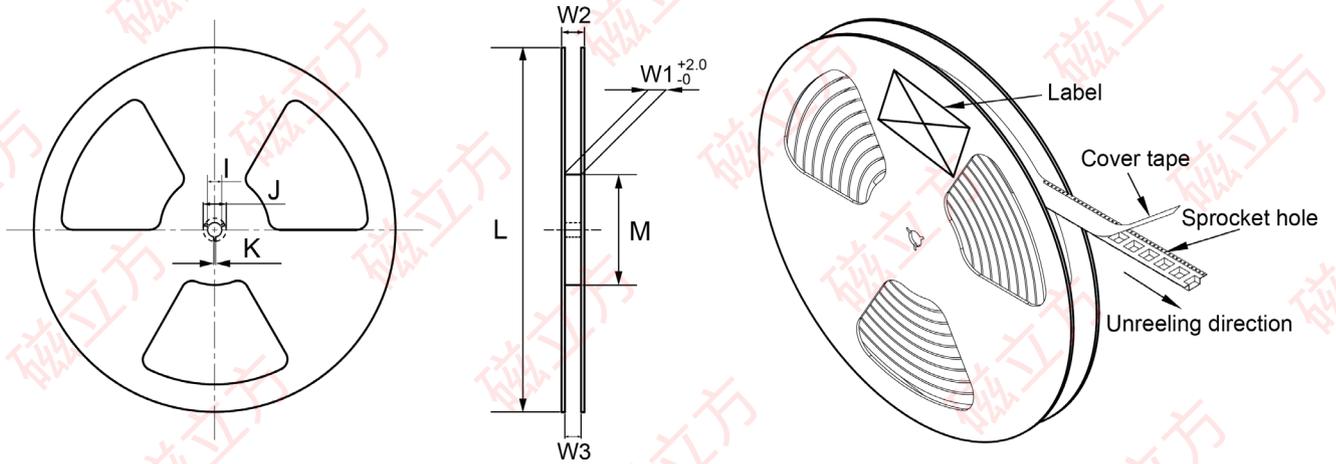


Cover tape peel off condition:



Cover tape peel force shall be 0.1 to 1.3N.

Reel dimensions:



(unit: mm)

Series	Quantity	I	J	K	L	M	W1	W2	W3
ASFB0735	1000pcs	13.0±0.5	21.0±0.8	2.0±0.5	330±2.0	100Min.	16.4	22.40Max	15.90Min
ASFB0750	1000pcs	13.0±0.5	21.0±0.8	2.0±0.5	330±2.0	100Min.	16.4	22.40Max	15.90Min
ASFB1045	800pcs	13.0±0.5	21.0±0.8	2.0±0.5	330±2.0	100Min.	24.4	30.40Max.	23.90Min.
ASFB1270	500pcs	13.0±0.5	21.0±0.8	2.0±0.5	330±2.0	100Min.	16.4	22.40Max.	15.90Min.