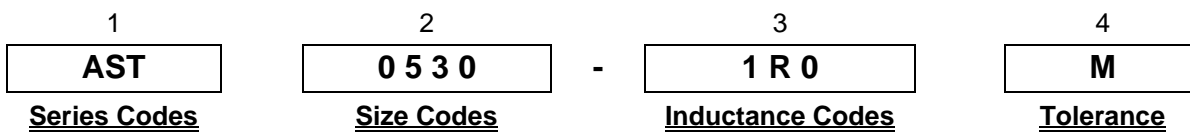


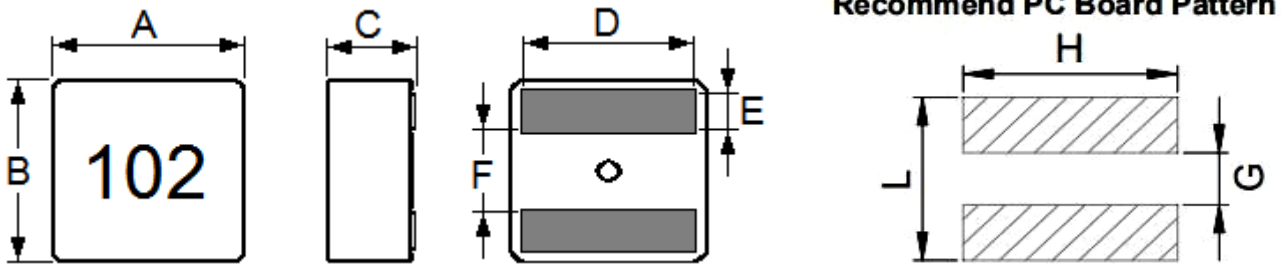
Product description:

1. Assemblage design, sturdy structure.
2. High inductance, high current, low magnetic loss, low ERS, small parasitic capacitance.
3. Flat wire winding, achieve a low DCR.
4. Temperature rise current and saturation current is less influenced by environment.
5. Operating temperature: -25°C~125°C.
6. Placement form is SMD.

Explanation of part numbers



Boundary dimension (unit: mm)



PCB Layout

Series	A	B	C	D	E	F	G	H	L
AST0420	4.1±0.2	4.1±0.2	1.9±0.2	3.4±0.3	0.88±0.3	1.6±0.3	1.4 ref	3.8 ref	3.4 ref
AST0520	5.5±0.2	5.3±0.2	1.9±0.2	4.3±0.3	1.1±0.3	2.3±0.3	2.0 ref	4.7 ref	4.5 ref
AST0530	5.5±0.2	5.3±0.2	2.9±0.2	4.3±0.3	1.1±0.3	2.3±0.3	2.0 ref	4.7 ref	4.5 ref
AST0630	6.6±0.2	6.4±0.2	2.8±0.2 L≤1.2μH	See Spec	1.4±0.3	2.6±0.3	2.5 ref	5.6 ref	5.6 ref
AST0630	6.6±0.2	6.4±0.2	2.9±0.2 L≥1.5μH	See Spec	1.4±0.3	2.6±0.3	2.5 ref	5.6 ref	5.6 ref



扁平线一体成型电感 AST04/05/06 系列

Flat wire molding power inductors AST04/05/06 series



Electrical Characteristics: TEST CONDITION: AT 25°C, 100KHz / 0.1V

Part No.	Lo(0A)	I _{rms} (A)	I _{sat} (A)	DCR(mΩ)	DCR(mΩ)			
	(μH)±20%	Type.	Type.	Type.	Max.			
AST0420-R10M	0.10	18.2	37.8	2.3	2.5			
AST0420-R22M	0.22	16.5	19.4	4.2	4.7			
AST0420-R36M	0.36	14.6	16.9	5.7	6.5			
AST0420-R40M	0.40	13.9	15.3	7.1	7.9			
AST0420-R47M	0.47	12.3	14.2	7.8	8.8			
AST0420-R56M	0.56	11.8	13.9	8.5	9.5			
AST0420-R60M	0.60	11.5	13.5	8.8	9.7			
AST0420-R72M	0.72	10.7	11.8	10.6	11.9			
AST0420-1R0M	1.00	9.5	9.5	13.5	15.0			
AST0420-1R2M	1.20	8.8	8.8	16.4	18.1			
AST0420-1R5M	1.50	7.5	7.8	21.2	23.8			
AST0420-1R8M	1.80	6.8	7.3	25.3	28.5			
AST0520-R15M	0.15	18.6	29.8	4.3	4.9			
AST0520-R16M	0.16	18.6	29.8	4.3	4.9			
AST0520-R33M	0.33	14.3	25.8	6.2	7.3			
AST0520-R47M	0.47	14.0	21.7	7.3	8.2			
AST0520-R56M	0.56	13.8	18.8	8.8	9.7			
AST0520-R68M	0.68	13.2	15.8	9.1	10.5			
AST0520-R80M	0.80	12.7	15.3	10.5	12.0			
AST0520-R82M	0.82	11.8	14.8	11.2	12.8			
AST0520-1R0M	1.00	10.1	14.3	12.3	14.1			
AST0520-1R2M	1.20	9.2	13.9	14.3	16.5			
AST0520-1R5M	1.50	8.5	13.1	16.5	19.0			
AST0530-R15M	0.15	22.0	35.8	2.15	2.4			
AST0530-R16M	0.16	22.0	34.7	2.15	2.4			
AST0530-R33M	0.33	18.9	27.9	3.3	3.6			
AST0530-R47M	0.47	18.3	25.6	3.8	4.3			
AST0530-R56M	0.56	17.5	22.0	4.2	4.7			
AST0530-R60M	0.60	17.5	21.8	4.2	4.7			
AST0530-R80M	0.80	13.0	19.8	5.2	5.8			
AST0530-R82M	0.82	12.6	19.5	5.4	5.9			
AST0530-1R0M	1.00	12.0	16.2	7.1	7.9			
AST0530-1R2M	1.20	11.0	14.7	8.9	9.9			
AST0530-1R5M	1.50	10.4	13.6	10.3	11.5			
AST0530-1R8M	1.80	9.8	12.1	11.7	12.9			



扁平线一体成型电感 AST04/05/06 系列

Flat wire molding power inductors AST04/05/06 series



AST0530-2R2M	2.20	9.5	9.8	13.3	14.8			
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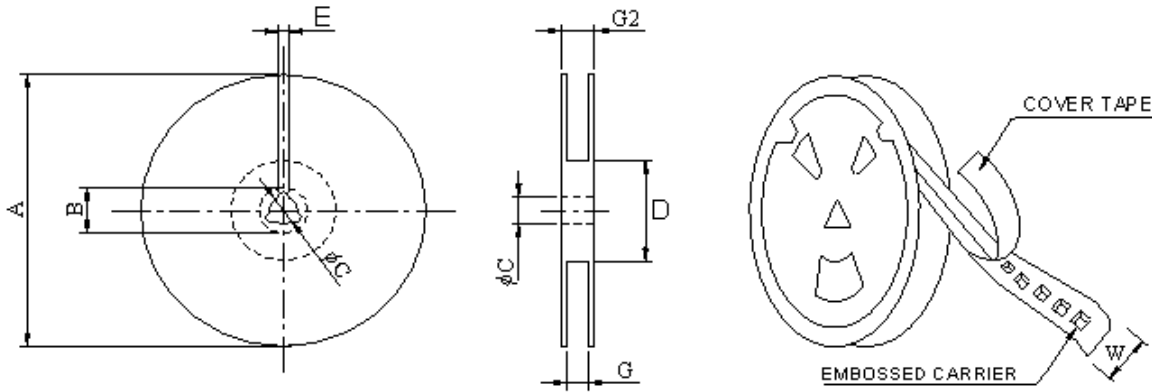
Electrical Characteristics: TEST CONDITION: AT 25°C, 100KHz / 0.1V

Part No.	Lo(0A)	Irms(A)	Isat(A)	DCR(mΩ)	DCR(mΩ)			
	(μH)±20%	Type.	Type.	Type.	Max.			
AST0530-3R3M	3.30	8.0	9.2	21.3	23.5			
AST0530-4R7M	4.70	5.6	8.0	33.2	36.7			
AST0630-R18M	0.18	31.5	40.0	1.8	2.0			
AST0630-R33M	0.33	24.8	31.8	2.3	2.6			
AST0630-R56M	0.56	21.6	28.6	3.1	3.5			
AST0630-R68M	0.68	19.8	24.7	4.9	5.3			
AST0630-1R0M	1.00	17.7	22.6	5.7	6.3			
AST0630-1R2M	1.20	15.8	21.7	6.9	7.7			
AST0630-1R5M	1.50	14.5	20.0	8.5	9.4			
AST0630-1R8M	1.80	13.6	18.0	9.5	10.5			
AST0630-2R2M	2.20	9.8	15.4	11.3	12.6			
AST0630-3R3M	3.30	8.0	11.8	19.0	21.2			
AST0630-4R5M	4.50	6.9	9.6	23.3	25.7			
AST0630-4R7M	4.70	6.6	9.5	23.5	26.0			

NOTE:

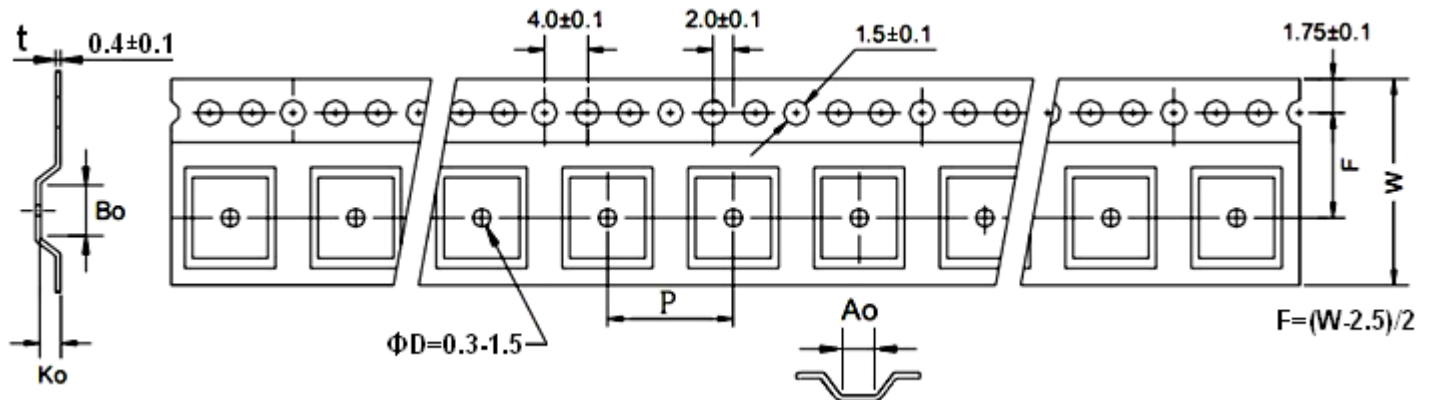
1. All test data is referenced to 25°C ambient.
2. Irms: DC current(A) that will cause an approximate ΔT of 40°C.
3. Isat: DC current(A) that will cause Lo to drop approximate 30%.
4. Operating temperature range is -25°C to 125°C.
5. The part temperature(ambient and temp rise) should not exceed 125°C under worse case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provision all affect the part temperature. Part temperature should be verified in the end application.

PACKING INFORMATION



*CARRIER TAPE WIDTH: W

TYPE	A(Ref.)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)	G(Ref.)	G2(Ref.)
13"(330mm)	330±1	20±0.8	13±0.5	100±1	2.0±0.5	W+0.5	W+4



Series	QTY (Pcs/Reel)	Ao	Bo	Ko	W	P
AST0420	3000 Ref.	4.4	4.6	2.3	12	8
AST0520	3000 Ref.	5.7	6.0	2.3	12	8
AST0530	2000 Ref.	5.7	6.0	3.3	16	8
AST0630	1000 Ref.	6.8	7.1	3.3	16	12

Typical Pulling Force: 10-130 grams

