



S SERIES



Features:

- High current, low loss of iron powder core
- Low profile for machine placement
- Minimize electromagnetic interference
- Suppress common mode noise
- Prevent EMI effect via precise impedance
- Custom design available

Part numbering system

**S 0450 - 3R3 M**

A      B      C      D

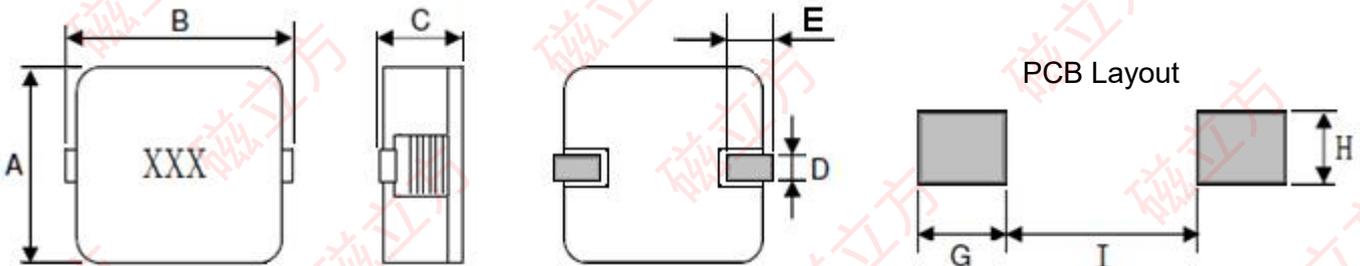
A : Series Name.

B : Dimension.

C : Inductance. ( for example 3R3=3.3 uH )

D : Inductance Tolerance. ( for example M=±20% )

Mechanical dimension: (Unit: mm)



系列	尺寸	A	B	C	D	E	G	H	I	
S0240		5.3±0.3	5.6±0.3	4.0±0.3	1.0±0.3	1.2±0.5	2.2	2.0	2.0	(new)
S2630		6.9±0.4	7.0±0.4	3.3Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4	
S2640		6.9±0.4	7.0±0.4	4.0Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4	
S2650		6.9±0.4	7.0±0.4	5.0Max	1.2±0.3	1.8±0.5	2.7	2.2	2.4	
S0430		10.2±0.5	10.5±0.5	3.1 Max	2.0±0.5	2.0±0.5	3.5	4.0	3.8	
S0440		10.2±0.5	10.5±0.5	4.2Max	2.0±0.5	2.0±0.5	3.5	4.0	3.8	
S0450		10.2±0.5	10.5±0.5	5.0Max	2.0±0.5	2.0±0.5	3.5	4.0	3.8	
S0535		12.8±0.5	13.0±1.0	3.5Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0	
S0550		12.8±0.5	13.0±1.0	5.0Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0	
S0565		12.8±0.5	13.0±1.0	6.5Max	2.5±0.5	3.0±1.0	4.5	5.0	6.0	
S0790		18.2±0.5	18.3±1.0	9.2Max	3.5±1.0	4.5±1.0	6.0	6.0	7.3	
S0912		22.0±1.0	22.5±1.0	12±0.4	3.5±1.0	5.5±1.0	7.0	6.0	9.0	



S SERIES

**Electrical Characteristics: TEST CONDITION: AT 25oC: 100KHz/0.1V**

PART NO.	L(0A)(uH) (±20%)	Irms(A) (Typ.)	Isat(A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Wurth P/N
S0240-R22M	0.22	20	25	1.25	1.38	744316022
S0240-R33M	0.33	18.5	20	1.75	1.93	744316033
S0240-R47M	0.47	15	16	2.75	3.03	744316047
S0240-R68M	0.68	12.75	13.5	4.0	4.4	744316068
S0240-1R0M	1.0	11.5	11.5	4.75	5.23	744316100
S0240-1R5M	1.5	9	9	8.15	8.97	744316150
S0240-2R2M	2.2	7.5	7.5	11.3	12.43	744316220
S0240-3R3M	3.3	5.75	5.8	18.5	20.35	744316330
S0240-4R7M	4.7	4.6	4.7	24.5	26.95	744316470
S0240-5R6M	5.6	4.5	4.6	28.5	31.35	744316560

NOTE:

1. All test data is referenced to 25°C ambient.
2. I<sub>rms</sub>: DC current(A) that will cause an approximate ΔT of 50°C.
3. I<sub>sat</sub>: DC current(A) that will cause L<sub>o</sub> to drop approximate 30%.
4. Operating temperature range is -40°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.



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#### Electrical Characteristics:

#### TEST CONDITION: AT 25oC: 100KHz/0.1V

PART NO.	L(0A)(uH) (±20%)	Irms(A) (Typ.)	Isat(A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Würth P/N
S2630-R13M	0.13	22.0	48.0	0.91	1.00	744310013
S2630-R24M	0.24	18.0	40.0	1.8	1.98	744310024
S2630-R52M	0.52	14.0	20.0	3.7	4.07	744310055
S2630-R95M	0.95	11.0	13.0	6.2	6.82	744310095
S2630-1R2M	1.15	8.5	13.0	8.6	9.46	744310115
S2630-1R5M	1.5	7.5	12.0	12.7	13.97	744310150
S2630-2R0M	2.0	6.5	9.0	14.2	15.62	744310200
S2640-R22M	0.22	21.0	32.0	1.1	1.21	744311022
S2640-R40M	0.4	19.0	25.0	1.85	2.04	744311047
S2640-R68M	0.68	17.0	20.0	3.1	3.41	744311068
S2640-1R0M	1.0	15.0	19.0	4.6	5.06	744311100
S2640-1R5M	1.5	11.0	14.0	6.6	7.26	744311150
S2640-2R2M	2.2	9.0	13.0	11.4	12.54	744311220
S2640-3R3M	3.3	6.5	11.0	17.2	18.92	744311330
S2640-4R7M	4.7	6.0	7.0	19.5	21.45	744311470
S2650-R24M	0.24	20.0	28.0	1.0	1.10	744314024
S2650-R47M	0.47	18.0	20.0	1.35	1.49	744314047
S2650-R76M	0.76	15.5	15.0	2.25	2.48	744314076
S2650-1R1M	1.1	15.0	13.0	3.15	3.47	744314110
S2650-1R5M	1.5	13.0	11.0	4.3	4.73	744314150
S2650-2R0M	2.0	11.5	9.0	5.85	6.44	744314200
S2650-3R3M	3.3	9.0	8.0	9.0	9.90	744314330
S2650-4R9M	4.9	6.5	6.5	14.5	15.95	744314490
S2650-6R5M	6.5	6.0	6.0	21.5	23.65	744314650
S2650-7R6M	7.6	4.2	4.8	30.2	33.22	744314760
S2650-8R5M	8.5	4.0	4.5	32.5	35.75	744314850
S2650-100M	10.0	3.5	4.0	33.0	36.30	744314101



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Electrical Characteristics:

TEST CONDITION: AT 25oC: 100KHz/0.1V

PART NO.	L(0A)(uH) (±20%)	I <sub>rms</sub> (A) (Typ.)	I <sub>sat</sub> (A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Würth P/N
S0430-R20M	0.20	22.0	50.0	0.82	0.90	744323020
S0430-R33M	0.33	18.0	36.0	2.17	2.39	744323033
S0430-R56M	0.56	18.0	33.0	2.17	2.39	744323056
S0430-R68M	0.68	14.0	21.0	4.79	5.27	744323068
S0430-1R0M	1.0	14.0	21.0	4.79	5.27	744323100
S0430-1R2M	1.2	12.0	15.0	6.6	7.26	744323120
S0430-1R5M	1.5	12.0	18.0	6.6	7.26	744323150
S0430-2R2M	2.2	9.0	15.0	11.38	12.52	744323220
S0440-R15M	0.15	25.0	60.0	0.58	0.64	744355215
S0440-R30M	0.30	22.0	35.0	1.10	1.21	744355230
S0440-R56M	0.56	20.0	30.0	1.61	1.77	744355256
S0440-1R0M	1.00	16.0	20.0	3.30	3.63	7443552100
S0440-1R5M	1.50	14.0	17.0	5.30	5.83	7443552150
S0440-2R2M	2.00	11.0	13.0	7.30	8.03	7443552200
S0440-2R8M	2.80	9.5	11.0	10.6	11.66	7443552280
S0440-4R3M	4.30	8.0	8.0	14.1	15.51	7443552430
S0450-R16M	0.16	25.0	58.0	0.51	0.56	744325016
S0450-R40M	0.40	24.0	37.0	0.67	0.74	744325040
S0450-R72M	0.72	22.0	35.0	1.30	1.43	744325072
S0450-1R2M	1.20	20.0	25.0	1.80	1.98	744325120
S0450-1R8M	1.80	16.0	18.0	3.50	3.85	744325180
S0450-2R4M	2.40	14.0	17.0	4.75	5.23	744325240
S0450-3R3M	3.30	12.0	15.0	5.90	6.49	744325330
S0450-4R2M	4.20	11.0	14.0	7.10	7.81	744325420
S0450-5R5M	5.50	10.0	12.0	10.3	11.33	744325550
S0450-6R5M	6.5	8.4	10.0	12.5	13.75	744325650
S0450-7R8M	7.8	8.0	9.5	13.6	14.96	744325780
S0450-100M	10	7.2	8.5	16.3	17.93	7443251000
S0450-160M	16	5.0	6.5	34.5	37.95	7443251600



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#### Electrical Characteristics:

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PART NO.	L(0A)(uH) (±20%)	I <sub>rms</sub> (A) (Typ.)	I <sub>sat</sub> (A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Würth P/N
S0535-R25N	0.25	24.0	60.0	0.75	0.83	744313025
S0535-R68M	0.68	22.0	40.0	1.58	1.74	744313068
S0535-1R2M	1.20	17.0	28.0	2.85	3.14	744313120
S0535-1R8M	1.80	14.0	22.0	5.60	6.16	744313180
S0535-2R2M	2.20	14.0	18.0	5.70	6.27	744313220
S0535-3R3M	3.30	12.0	14.0	8.10	8.91	744313330
S0550-R19M	0.19	29.0	60.0	0.50	0.55	744355019
S0550-R47M	0.47	26.0	50.0	0.90	0.99	744355047
S0550-R90M	0.90	24.0	28.0	1.60	1.76	744355090
S0550-1R4M	1.40	22.0	26.0	2.40	2.64	7443550140
S0550-2R3M	2.30	17.5	17.0	3.70	4.07	7443550230
S0550-3R2M	3.20	16.0	15.0	5.30	5.83	7443550320
S0550-4R8M	4.80	11.0	13.0	10.5	11.55	7443550480
S0550-6R0M	6.00	9.5	11.5	13.5	14.85	7443550600
S0550-8R2M	8.20	10.0	11.0	11.60	12.76	7443550820
S0550-100M	10.0	8.5	10.0	14.10	15.51	7443550101
S0565-R20M	0.20	32.0	65.0	0.35	0.39	744355122
S0565-R47M	0.47	30.0	50.0	0.67	0.74	744355147
S0565-R82M	0.82	27.0	35.0	0.90	0.99	744355182
S0565-1R3M	1.30	25.0	25.0	1.80	1.98	7443551130
S0565-2R0M	2.00	23.0	22.0	2.60	2.86	7443551200
S0565-2R8M	2.80	20.0	17.5	3.30	3.63	7443551280
S0565-3R7M	3.70	17.0	16.0	4.90	5.39	7443551370
S0565-4R7M	4.70	13.0	15.0	7.00	7.70	7443551470
S0565-6R0M	6.00	12.0	14.0	8.40	9.24	7443551600
S0565-7R3M	7.30	13.0	12.0	5.90	6.49	7443551730
S0565-9R2M	9.20	12.0	10.5	7.80	8.58	7443551920
S0565-110M	11.3	11.0	9.5	9.10	10.0	7443551111
S0565-130M	13.0	10.0	9.0	11.2	12.32	7443551131
S0565-150M	15.4	9.0	8.0	14.8	16.28	7443551151
S0565-220M	22.0	6.0	6.5	24.7	27.17	7443551221



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PART NO.	L(0A)(uH) (±20%)	Irms(A) (Typ.)	Isat(A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Wurth P/N
S0790-R82M	0.82	41.5	65.0	0.54	0.58	7443556082
S0790-1R3M	1.30	34.5	62.0	0.94	1.02	7443556130
S0790-1R9M	1.90	32.5	52.0	1.20	1.30	7443556190
S0790-2R6M	2.60	31.5	50.0	1.58	1.71	7443556260
S0790-3R5M	3.50	22.5	37.0	3.10	3.35	7443556350
S0790-4R5M	4.50	20.5	37.0	3.40	3.67	7443556450
S0790-5R6M	5.60	19.0	33.0	3.70	4.00	7443556560
S0790-6R8M	6.80	18.5	27.0	4.10	4.43	7443556680
S0790-100M	10.0	15.0	21.5	6.90	7.45	74435561100
S0790-100M-MN	10.0	16.50	18.5	7.10	7.67	74435571100
S0790-150M-MN	15.0	14.0	14.0	9.30	10.05	74435571500
S0790-220M-MN	22.0	11.0	11.0	14.6	15.77	74435572200
S0790-330M-MN	33.0	8.5	9.0	22.6	24.41	74435573300
S0790-470M-MN	47.0	6.8	7.0	34.0	36.72	74435574700

PART NO.	L(0A)(uH) (±20%)	Irms(A) (Typ.)	Isat(A) (Typ.)	DCR(mΩ) Typ.	DCR(mΩ) Max.	Refer to Wurth P/N
S0912-3R3M-MN	3.3	29	45	1.7	1.87	74435580330
S0912-6R8M-MN	6.8	28.5	31	2.1	2.31	74435580680
S0912-8R2M-MN	8.2	25.5	30	2.7	2.97	74435580820
S0912-100M-MN	10.0	21	26	3.4	3.74	74435581000
S0912-120M-MN	12.0	19	25	4.3	4.73	74435581200
S0912-220M-MN	22.0	15	18	7.0	7.7	74435582200
S0912-330M-MN	33.0	11.5	15	13.2	14.52	74435583300
S0912-470M-MN	47.0	9	12	19.2	21.12	74435584700
S0912-680M-MN	68.0	7.5	9.5	27.3	30.03	74435586800
S0912-820M-MN	82.0	7	8.5	30.4	33.44	74435588200

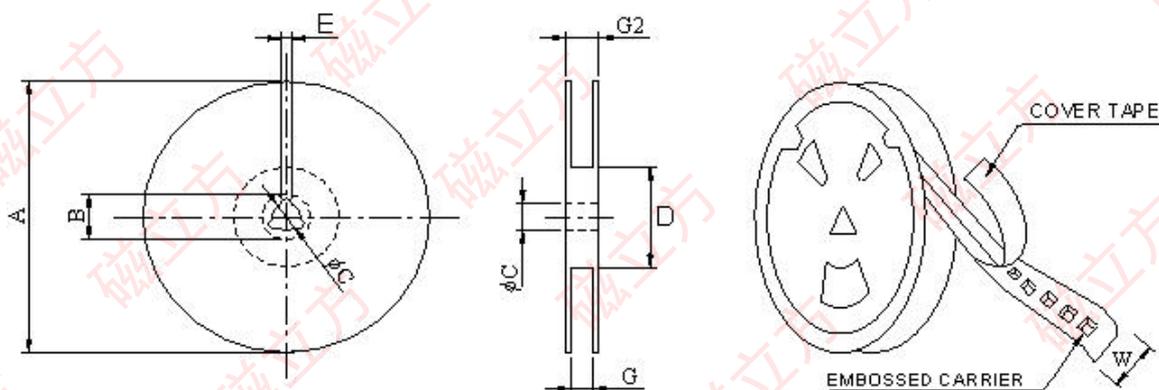
#### NOTE:

- All test data is referenced to 25°C ambient.
- Irms: DC current(A) that will cause an approximate ΔT of 50°C.
- Isat: DC current(A) that will cause Lo to drop approximate 30%.
- Operating temperature range is -40°C to 125°C.
- 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.



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PACKING INFORMATION

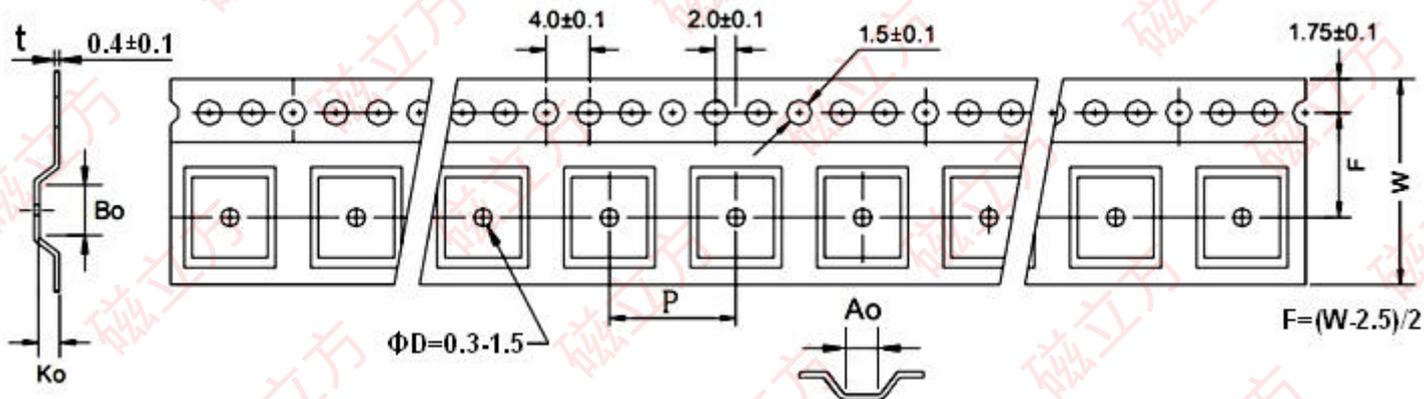


\*CARRIER TAPE WIDTH: W

Series	TYPE	A(Ref.)	B(Ref.)	C(Ref.)	D(Ref.)	E(Ref.)	G(Ref.)	G2(Ref.)
S0240	13**12mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	12.5±0.5	16.5±0.5
S2630	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
S2640	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
S2650	13**16mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	16.5±0.5	20.5±0.5
S0430	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0440	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0450	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0535	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0550	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0565	13**24mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	24.5±0.5	28.5±0.5
S0790	13**32mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	32.5±0.5	37±0.5
S0912	13**44mm	330±1	20±0.8	13±0.5	100±1	2.0±0.5	44.5±0.5	49±0.5



S SERIES



Series	QTY (Pcs/Reel)	Ao	Bo	Ko	W	P
S0240	1500	5.6	6.0	4.2	12	8
S2630	1500	7.2	7.8	3.5	16	12
S2640	1000	7.2	7.8	4.2	16	12
S2650	1000	7.2	7.8	5.2	16	12
S0430	1000	10.8	11.3	3.5	24	16
S0440	1000	10.8	11.3	4.2	24	16
S0450	800	10.8	11.3	5.2	24	16
S0535	600	13.5	14.0	3.7	24	16
S0550	500	13.5	14.0	5.2	24	16
S0565	500	13.5	14.0	6.7	24	16
S0790	250	18.8	19.4	9.5	32	24
S0912	120	23.1	23.65	12.8	44	32

